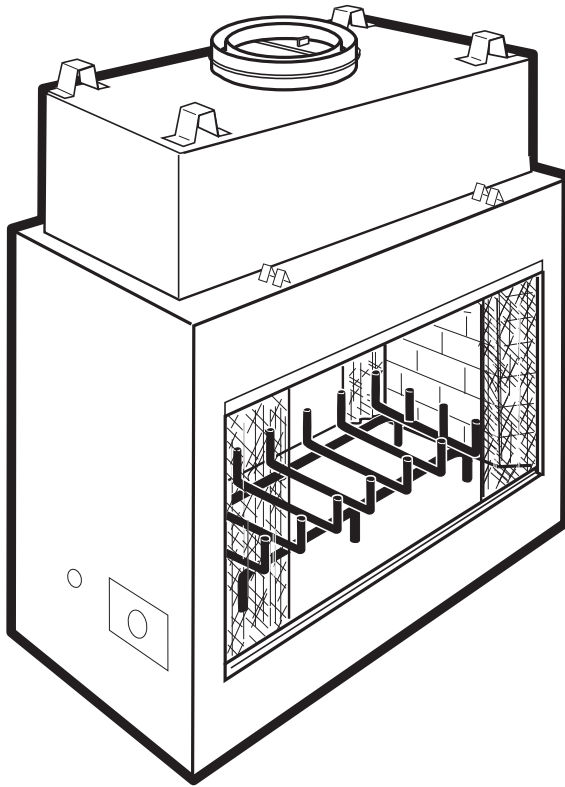




STR36 Designer Woodburning Fireplace

Homeowner's Installation and Operating Manual



DO NOT DISCARD THIS MANUAL: Retain for future use.

Safety Information

PLEASE READ THIS MANUAL BEFORE INSTALLING AND USING FIREPLACE.

IMPORTANT: Read all instructions and warnings carefully before starting installation. Failure to follow these instructions may result in a possible fire hazard and will void the warranty.

Description

The STR36 fireplaces are multi-side solid fuel, woodburning fireplaces. These are radiant models only and include a preinstalled outside air kit.

Precautions

MHSC and component parts have been highly tested and will operate safely when installed in accordance with instructions provided in this manual. Carefully read and understand all instructions **before** beginning installation. If you notice any damage to fireplace or component parts, immediately report damage to your MHSC dealer. Only use MHSC components or the warranty will be voided and a fire hazard may be created. MHSC warranty will be voided by and MHSC disclaims any responsibility for the following actions:

- **Installation by any other than a qualified installer, preferably NFI or WETT (Canada) certified.**
- **Installation of any damaged fireplace or chimney component;**
- **Modification of fireplace, chimney assembly or any component parts thereof; (except for chase flashings as detailed in the Chimney Top installation instructions).**
- **Installation other than as instructed by MHSC; or**
- **Installation and/or use of any component part not manufactured or approved by MHSC in combination or assembly with a MHSC fireplace system, notwithstanding any independent testing laboratory or other third party approval of such component parts or accessory.**

Any such action may possibly cause a fire hazard. Consult local building codes to ensure that you are in compliance **before** installing the fireplace. Fireplaces must be vented to the out-of-doors. **Do not obstruct or modify air inlets/outlets in any manner.**

- **Do not install combustible materials on any of the black fireplace surround.**
- **Burn only solid wood fuel or gas logs.**
- **Do not install a solid fuel burning insert or other products not specified for use with this fireplace.**

Proposition 65 Warning: Fuels used in gas, wood-burning or oil fired appliances, and the products of combustion of such fuels, contain chemicals known to the State of California to cause cancer, birth defects and other reproductive harm.
California Health & Safety Code Sec. 25249.6

WARNING: Check with your electronics manufacturer before installing a television or other electronic device above this fireplace.

Drafts

The fireplace should not be located in areas that create drafts (ie: frequently opened doors and central heating air inlets/outlets) that hamper the normal flow of air into the fire.

Gas Logs

If you plan to install a gas log, the gas line should be installed **before** framing the fireplace. The gas line must be installed by a certified gas line installer.

STR36 Listed
UL 127 / ULC-S610 Standard for Factory Built Fireplaces

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STR36 Fireplace Dimensions

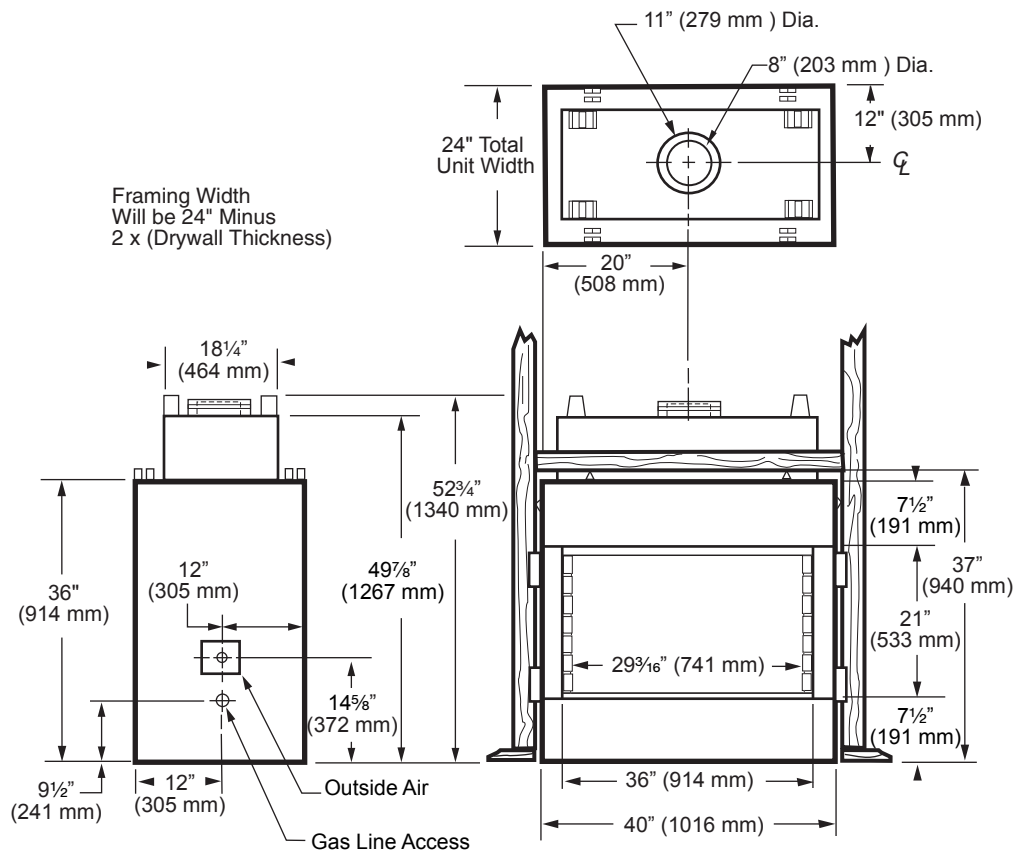


Fig. 1 STR36 specifications and framing.

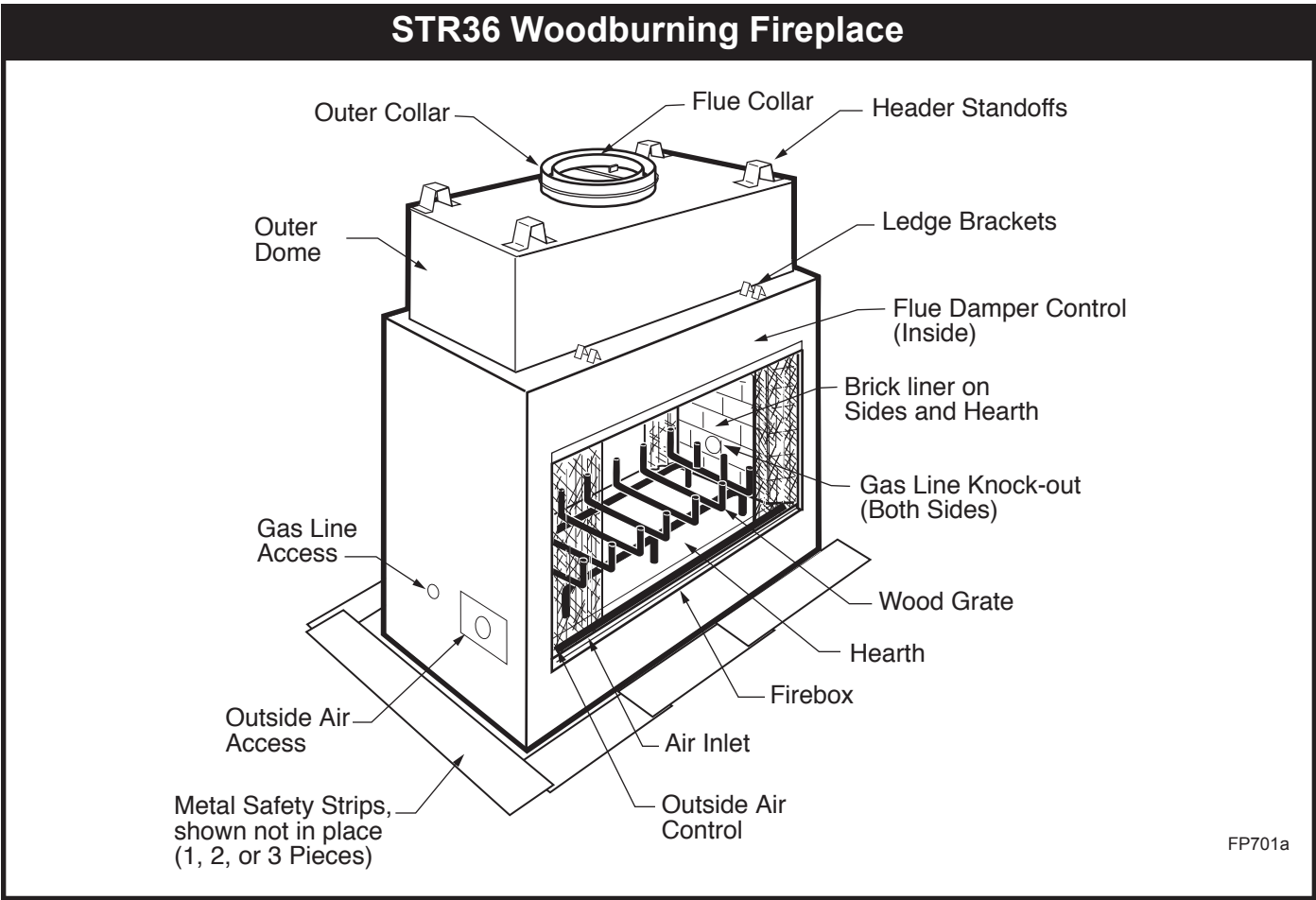


Fig. 3 STR36 Parts Identification.

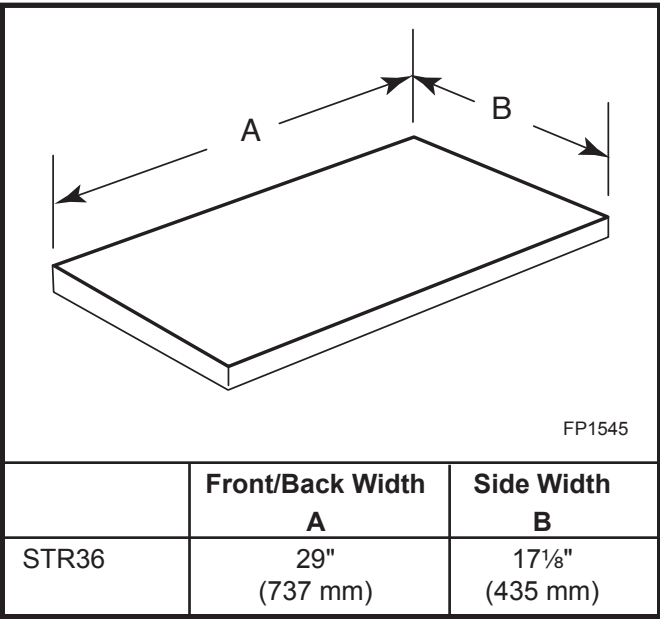
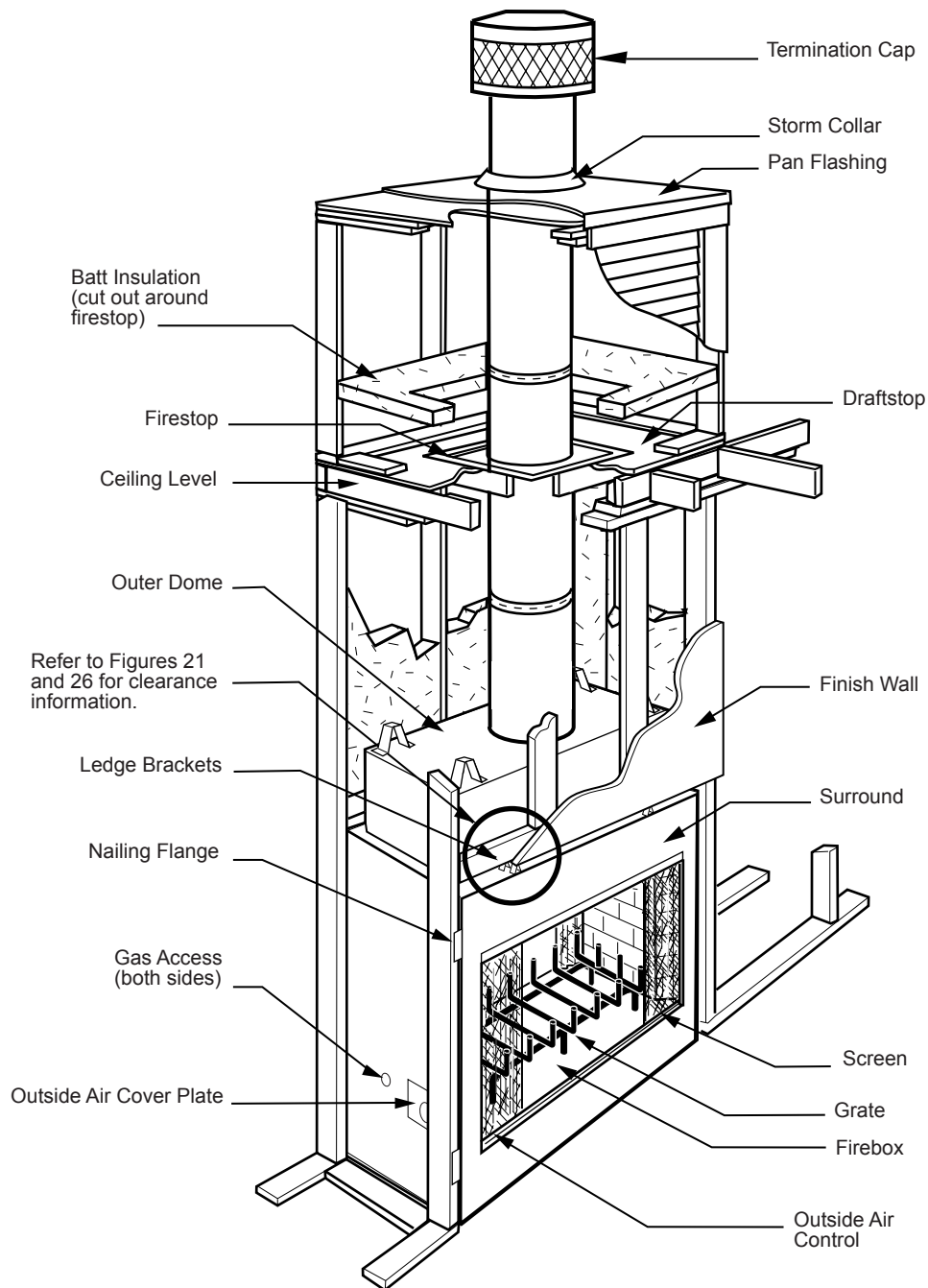


Fig. 3a Hearth dimensions.

Chase Installation

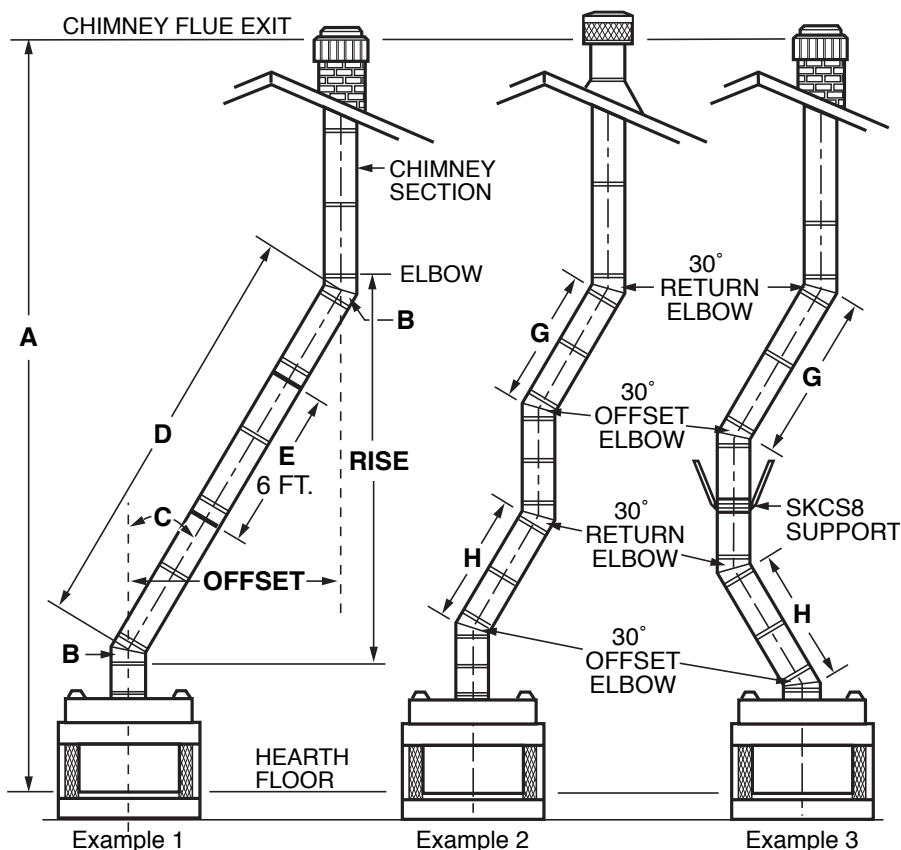
Insulation methods shown are optional for cold climate, not a requirement for unit operation.



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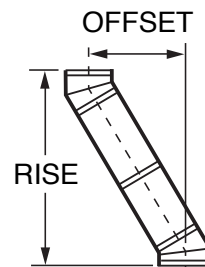
Fig. 4 Fireplace and chase parts identification.

Chimney Requirements - Offset Installations



Notes: G + H cannot exceed 20 feet.
Air Space Clearances:
SK8 (2-wall) = 1½"

FP720



FP282

30° Elbow Offsets

1'	1½'	3'	4'	Chimney Support	Offset	Rise
0	0	0	0	0	3"	11"
1	0	0	0	0	8¼"	20"
0	1	0	0	0	11¼"	25¼"
2	0	0	0	0	13½"	29¼"
1	1	0	0	0	16½"	34¼"
0	0	1	0	0	20¼"	40¾"
2	1	0	0	0	21¾"	43½"
0	0	0	1	0	26¼"	51¼"
0	1	1	0	0	28½"	55¼"
1	0	0	1	0	31½"	60¼"
0	1	0	1	0	34½"	65½"
0	0	2	0	0	37½"	70¾"
1	1	0	1	1	41½"	77¾"
0	0	1	1	1	45"	83¾"
0	1	2	0	1	47¼"	87½"
0	0	0	2	1	51"	94"
0	1	1	1	1	53¼"	98"
0	0	3	0	1	56¼"	103¼"
0	1	0	2	1	59¼"	108½"
0	0	2	1	1	62¼"	113½"
0	1	3	0	1	64½"	117½"
0	0	1	2	1	68¼"	124"
0	1	2	1	1	70½"	128"
0	0	0	3	1	74¼"	134½"
0	1	1	2	2	78"	140¾"
0	0	3	1	2	81"	146"
0	1	0	3	2	84"	151¼"
0	0	2	2	2	87"	156½"
0	1	3	1	2	89¼"	160¼"
0	0	1	3	2	93"	166¾"
0	1	2	2	2	95¼"	170¾"
0	0	0	4	2	99¼"	177¾"
0	1	1	3	2	101¼"	181¾"
0	0	3	2	2	104¼"	186¼"
0	1	0	4	2	107¼"	191½"
0	0	2	3	2	110¼"	196¾"
0	1	3	2	3	114"	203¼"
0	0	1	4	3	117¾"	209¾"
0	1	2	3	3	120"	213½"
0	0	0	5	3	123¾"	220"

Illustration Key

The following safety rules apply to offset installations (letters correspond with illustration above):

A. Height of the chimney is measured from the hearth to the chimney exit.

	STR36
Maximum:	90'0"
Minimum:	
Without Elbows	15'6"
With 2 Elbows*	17'6"
With 4 Elbows*	21' 0"

B. Do not use more than 4 elbows per chimney.

Attach the straps of the return (top) elbow to a structural framing member.

The offset (first) elbow of any pair does not have straps.

C. The chimney cannot be more than 30° (45° in Canada) from the vertical plane in any installation*.

D. The maximum length of the angled run of the **total** chimney system is 20 feet. (G plus H cannot exceed 20 feet.)

E. A chimney support (Models TCS8A) is required every 6 feet of angled run of chimney. Chimney supports are required for every 30 feet and 60 feet of vertical chimney height above the hearth.

Determine the offset distance of your chimney arrangement from the centerline of the fireplace to the centerline of the chimney where it is to pass through the first ceiling.

NOTE: This offset distance may not be your full offset distance. See Examples 2 and 3.

* In Canada, two (2) SK845 are allowed.

Fig. 5 Chimney system requirements.

Planning Information

Preplanning an installation is very important to ensure safety and to save time and money. An installer must predetermine where a fireplace will be set and how the chimney system will be run.

NOTE: The STR36 model uses MHSC SK8 (2-wall) chimney systems.

Mounting the Fireplace

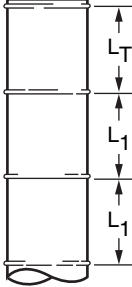
A fireplace may only be mounted on the following surfaces:

1. A flat combustible surface.
2. A raised wooden platform.
3. A concrete block or other solid object placed beneath each of the four (4) corners of the fireplace.

The fireplace **must** be spaced 1/2" (13 mm) from a combustible back wall and 1/2" (13 mm) from a combustible side wall or support. (Page 14, Fig. 20)

Planning the Chimney Run

Determine how the chimney will be run, length of run and chimney components required to complete the job. (Fig. 6) **Never** install a chimney below minimum heights.

	MODEL SK & 2 WALL CHIMNEY	TOTAL LENGTH (L _T)	INSTALLED LENGTH (L _I)
	SK81	11½"	10½"
	SK818	17½"	16½"
	SK83	35½"	34½"
	SK84	47½"	46½"

FP705

Fig. 6 Installed lengths of chimney sections.

In planning a chimney system, it is important to know:

1. The height of a chimney is measured from the hearth to the exit point on the termination.
2. A chimney cannot be offset more than 30° from a vertical plane.
3. A chimney may run straight up or it may be necessary to offset it to avoid obstructions.
4. The maximum length of an angled run (total chimney system) is 20' (6 m).
5. No more than 2 offsets (4 total 30° elbows in U.S./or 2 total 45° elbows in Canada) per fireplace may be used.
6. A guy wire stabilizer is required for chimneys extending more than 6' (1.8 m) above a roof line.

The Ten Foot Rule

Major U.S. building codes specify a minimum chimney height above the roof top. The "Ten Foot Rule" is a fire safety rule and not a draft rule. To ensure proper draft, it is recommended that you always meet or exceed the "Ten Foot Rule," especially when installing a termination on a high pitch roof. (Fig. 7)

The key points of the "Ten Foot Rule" are:

1. If the horizontal distance from the chimney to the peak of the roof is 10' (3 m) or less, the top of the chimney must be at least 2' (610 mm) above the peak of the roof, but never less than 3' (914 mm) in height above the highest point where it passes through the roof.
2. If a horizontal distance from the chimney to the peak of the roof is more than 10' (3 m), a chimney height reference point is established on the surface of the roof a distance of 10' (3 m) from the chimney in a horizontal plane. The top of the chimney must be at least 2' (610 mm) above the reference point, but never less than 3' (914 mm) in height above the highest point where it passes through the roof.

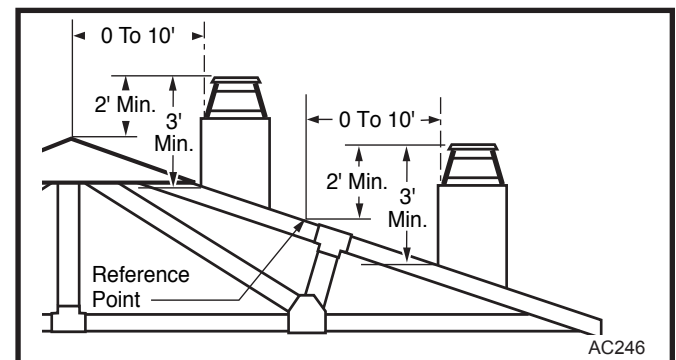


Fig. 7 Ten Foot Rule illustration.

Chimney Supports

The chimney system is supported by the fireplace for vertical chimney heights less than 20' (6 m) above the hearth. Chimney supports are required if the vertical height exceeds 20' (6 m). Locate chimney supports at ceiling holes or other structural framing at 20' (6 m) heights. Spacing between chimney supports **must not** exceed 20' (6 m). Use Chimney Support Model SKCS8 for SK8 chimney. **(NOTE: the chimney support can not be mounted directly to the fireplace.)** Support provided by elbow straps fulfills the support requirement only if they are spaced as previously described. (A chimney support is 2½" (64 mm) long when installed.)

Angled chimney runs require a support every 6' (1.8 m) in addition to the elbow straps. Chimney supports are used for this function. (Fig. 9)

Chase Installation

A chase is a vertical box-like structure which encloses the fireplace and/or chimney. Chases are typically built on the outside of the house with fireplace opening cut into the outer wall of a room. (Page 5, Fig. 4)

If you need help in determining fireplace location or how the chimney system should be run, contact your MHSC dealer for assistance.

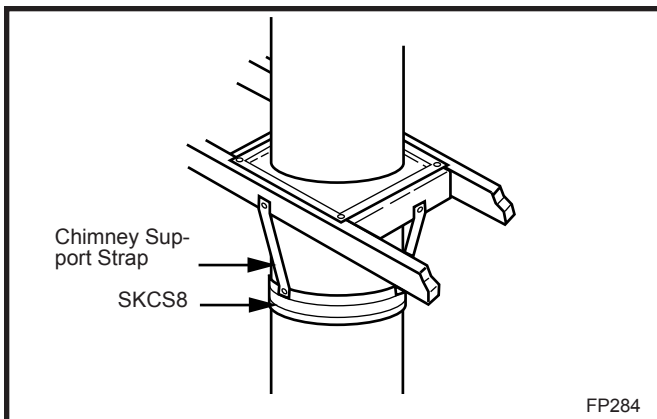


Fig. 8 Chimney support installation

Installation

Insulating Fireplace Enclosure for Cold Climates

If you live in a cold climate, it is not required but **highly recommended** that you insulate fireplace enclosure to eliminate cold air penetration as much as possible.

Insulate base of fireplace with a non-combustible insulation rated for a minimum of 300°F. Insulating is **very important** for outside wall installations over a concrete slab. If fireplace is installed on a platform, insulation should be placed on top of the platform **before** fireplace is set. (Fig. 9)

When a fireplace is installed in a chase or on a outside wall, enclosure should be treated like any outside wall in a home. Insulation should be installed on the inside wall as well as the outside wall(s). In a chase, it is also a good idea to install a firestop at the first ceiling level above the fireplace and enclose the chase with sheeting material. Insulation may then be installed above sheeting material to assure the space around the fireplace is totally protected. (Fig. 4)

When installing the chimney, **DO NOT** caulk between outer pipe and firestop. It is vital that some air be allowed to flow through this very thin gap.

CAUTION: WHEN INSTALLING A FIREPLACE IN AN INSULATED ENCLOSURE, BE SURE ALL REQUIRED AIR SPACES ARE MAINTAINED. (Page 14, Fig. 20)

Framing

Framing can be constructed before or after the fireplace is set in place, however, most installers build the frame before setting the fireplace.

Frame fireplace with 2 x 4 lumber or heavier materials. Refer to framing dimensions in Figures 1, 2, 3 or 4 for basic fireplace specifications. Headers and support studs must be turned on end as illustrated on Page 5, Figure 4.

NOTE: Framing should be positioned to accommodate wall covering and fireplace facing material. **Maintain 1/2" (13 mm) air space between the outer dome and any combustible framing materials that may be supported by the ledge brackets. Refer to Figures 20 and 26 for details.**

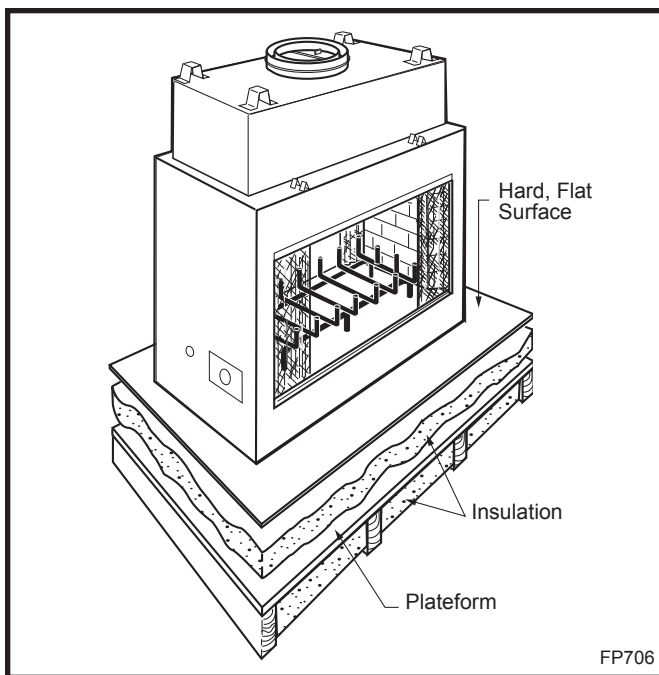


Fig. 9 Insulating between platform and fireplace.

Chimney Set-up

Since you have already preplanned the chimney run, you should know exactly how the installation is to be accomplished — how much pipe is required, the number of elbows, if any, and type of termination to be used.

CAUTION: REPORT TO YOUR DEALERS ANY PARTS DAMAGED IN SHIPMENT, SPECIFICALLY CHECK THE END CONNECTION OF CHIMNEY SECTIONS AND ELBOWS.

NOTE: The STR36 model uses MHSC SK8 (2-wall) chimney systems.

Straight-Up Chimney Installation

To locate the centerline of the flue put the fireplace in final position and place a plumb bob from the ceiling to the center of the fireplace flue collar. Mark this spot on the ceiling. Draw a line through that mark to either side of the firebox and indicate dimension X to locate the side wall framing. (Fig. 10) Be sure to observe clearance requirements for side and parallel combustible walls as noted in Page 16, Figure 23.

Offset Installation

In order to clear an obstruction, it may be necessary to offset chimney from vertical. This is accomplished by using MHSC elbows. Use the *30° Offset Elbow* table on Page 6 to determine proper offset and parts required.

Each offset requires two (2) elbows. The second elbow is equipped with support straps. It is very important to install the second elbow in each offset as close to the ceiling or support as possible so that the elbow straps can be secured to framing members to help support the weight of the chimney.

Determine offset distance of your chimney arrangement from centerline of fireplace to centerline of chimney where it is to pass through ceiling.

Locate center point of the chimney on ceiling as though a straight up chimney arrangement is to be used. Measure your offset dimension from the chimney center point on the ceiling.

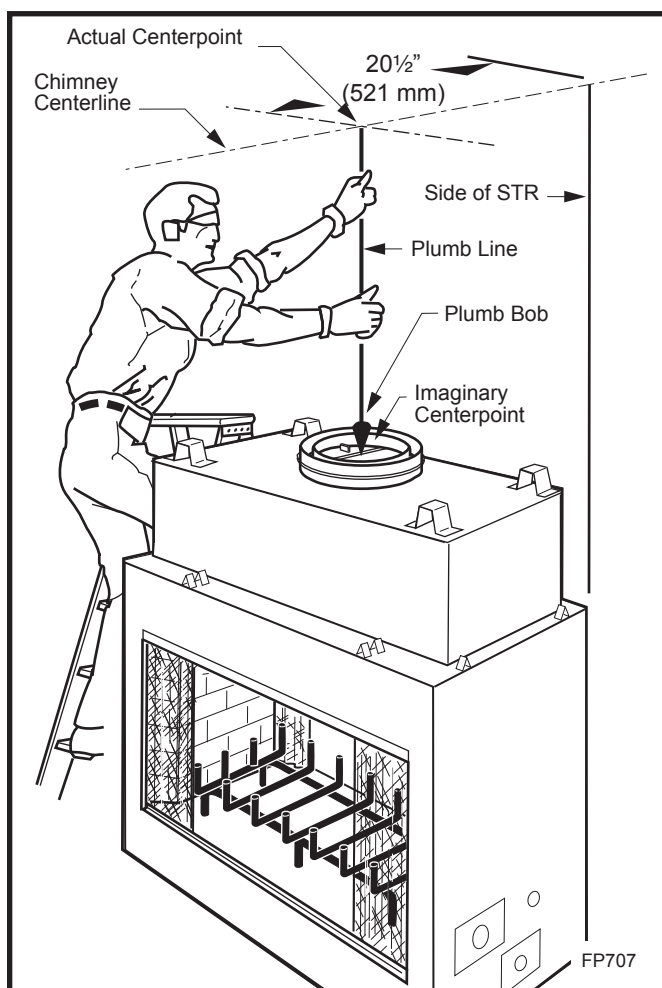


Fig. 10 Locate centerline of chimney with plumb line.

Ceiling Chimney Hole/ Possible Obstructions

The size of the hole in ceiling will vary with the angle at which the chimney passes through ceiling.

Drive a nail up through ceiling at marked chimney center point. Go to floor above and see where hole will be cut. Check to see where existing ceiling joists and other possible obstructions are located...i.e. wiring, plumbing etc... If necessary, re-position chimney and/or fireplace to avoid obstructions.

Cutting the Hole

Cover fireplace collar opening and cut proper sized chimney hole in chimney. The SK8 pipe allows you to run pipe through a typical 16" on center joist without cutting joists.

Framing the Ceiling Hole

Frame the ceiling chimney hole as shown in Figure 12. It is good practice to use framing lumber that is the same size as the ceiling joists; this is a requirement at attic level.

The following table gives firestop spacer model numbers:

Size of Chimney	Angle of Chimney at Ceiling	
	Vertical	30°
8" Flue "SK" Series	SKFS2A 14 1/2" x 14 1/2" (368 x 368 mm)	SKFS6A 14 1/2" x 25 1/2" (368 x 648 mm)

Fig. 11 Ceiling chimney hole sizes necessary for installing firestop spacer.

The **inside dimension** of the frame **must be** the same as the hole size selected from Figure 12 in order to provide the required air space (1 1/2" (38 mm) with SK8 between the outside diameter of the chimney and the edges of the framed ceiling hole.

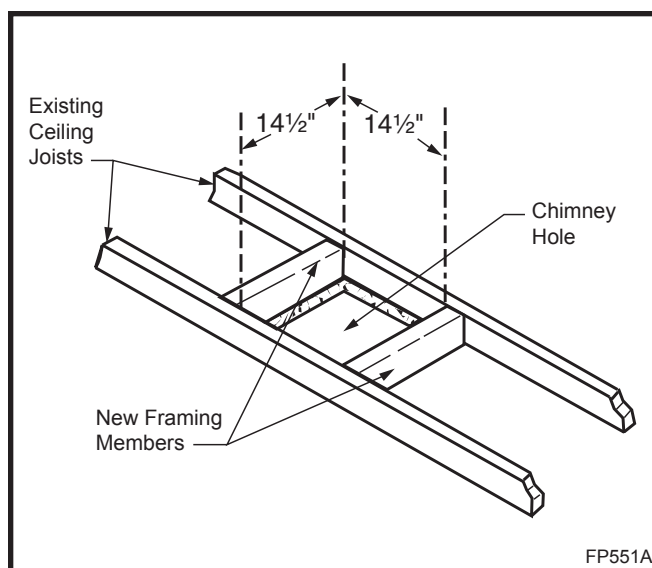


Fig. 12 Typical frame for ceiling chimney hole.

Positioning, Safety Strips, Securing the Fireplace

Slide fireplace into position.

Lift the fireplace front slightly and slide the metal safety strips under front bottom edge about 1½" (38 mm), allowing the remainder to extend in front of firebox. Overlap strips at least ½" (13 mm) to provide a positive joint. (Flat safety strips are packed with fireplace.) (Fig. 13)

Safety strips are used to ensure that any combustible materials in front of the fireplace are protected even though a noncombustible hearth extension is required.

If fireplace is to be elevated above the floor, a "Z" shaped metal safety strip must be fabricated and used to protect combustible surfaces in front of the fireplace. This "Z" shaped safety strip is not provided but must be fabricated of metal with each horizontal leg at least 1½" (38 mm) wide and equal in length to the metals strips provided with the fireplace.

NOTE: Safety strips are not required over non-combustible floors where all supports at the base of the fireplace are noncombustible.

Eight (8) nailing flanges are supplied with the fireplace (found on the fireplace hearth). To level the box and secure it firmly in place, remove the nailing flanges from the hearth and install at the sides of the fireplace as shown in Figure 14.

Outside Air Kit

An outside air kit damper is installed in STR36 Fireplaces. If desired, or if local codes mandate the use of an air kit, then an AK-MST is required to complete the installation (from air kit to the outdoors). If the outside air kit is to be used, the AK-MST Air Termination Kit **MUST** be installed **BEFORE** the fireplace is enclosed. Refer to the AK-MST instructions for field installation. The outside air kit control is located in the lower left hand side of the fireplace behind the screen panel. (Fig. 15) To operate, simply lift up to close or push down to open.

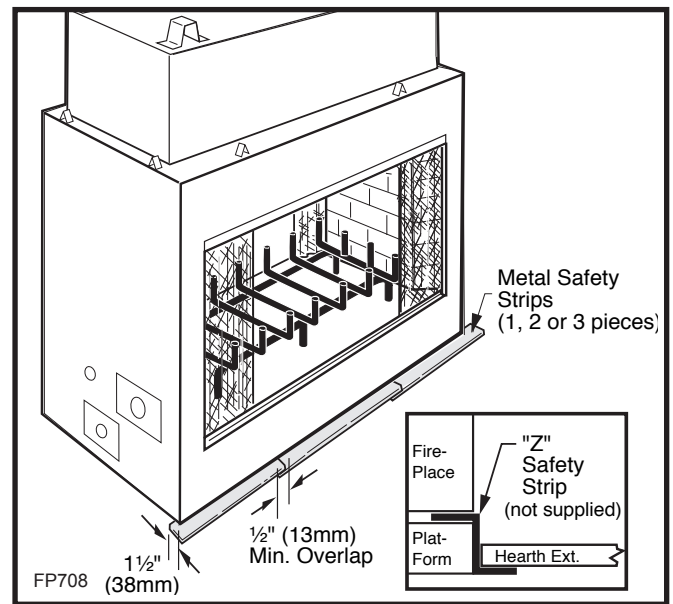


Fig. 13 Safety strip installation.

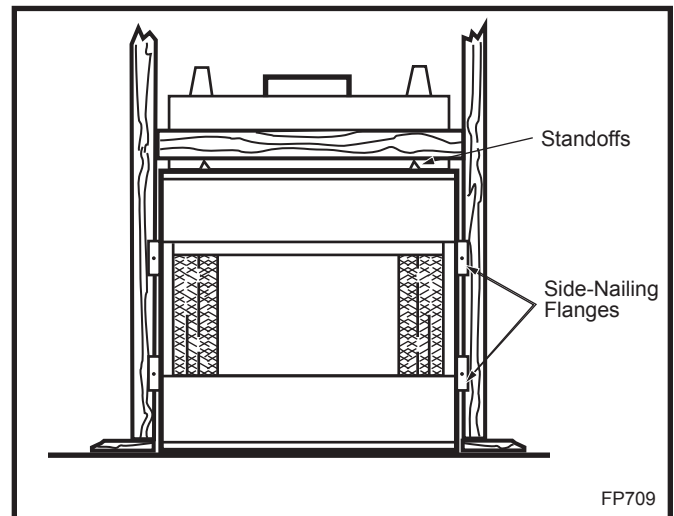


Fig. 14 Fasten fireplace in position.

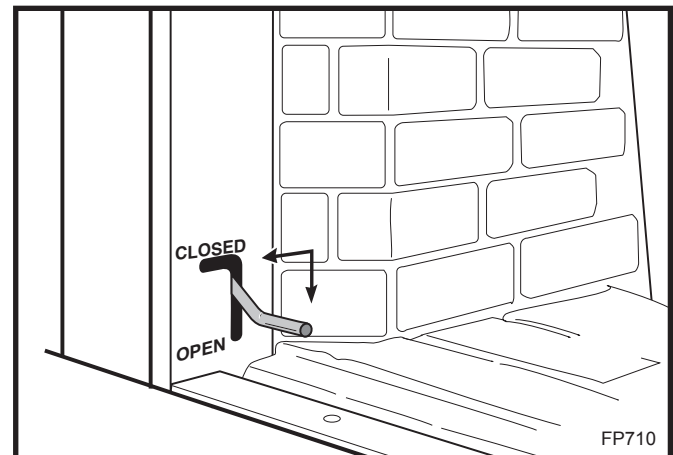


Fig. 15 Outside air operation.

Installing the Chimney System

Start by attaching the first chimney section to the collar on top of the fireplace.

Install the pipe as pictured in Figure 16. When you get a good lock, you will hear the pipe clearly snap together. Once sections are snap-locked in place, it is extremely difficult to get them apart. **Make sure the pipe is firmly snapped and locked together as each pipe section is mounted.**

When installing elbows, only outer pipe will snap-lock. Middle pipes simply slide into position. Be sure to always attach straps on upper elbow to a structural framing member. (Fig. 17)

Continue installing the pipe as required until pipe is installed up through the ceiling. At this point, you must install a firestop spacer. Refer to Figure 18 for appropriate spacer orientation.

Installing the Firestop Spacer in the Ceiling Hole

A firestop spacer is used to keep pipe spaced properly and required for safety.

Nail the firestop spacer (at each corner) to the framing members of the ceiling hole. **NOTE:** A firestop spacer is not required at the roof.

Hole sizes listed in Figure 12 for angled firestop spacers provide minimum required air space to chimney pipe for ceiling thickness up to 8" (203 mm). When combined thickness of ceiling material, ceiling joists and flooring material exceeds 8" (203 mm), adjustments must be made in framing to assure that minimum air spaces to chimney are maintained.

Proper Firestop Spacer Installation

Figure 18 shows different installation procedures for both an area that *is* an attic and an area that *is not* an attic.

If the area above the ceiling **is not** an attic, position the firestop spacer with the flange on the ceiling side and the angled portion extending up into the hole.

If the area above the ceiling **is** an attic, position the firestop spacer with the flange on the top of the framed hole and the angled portion extending down into the hole.

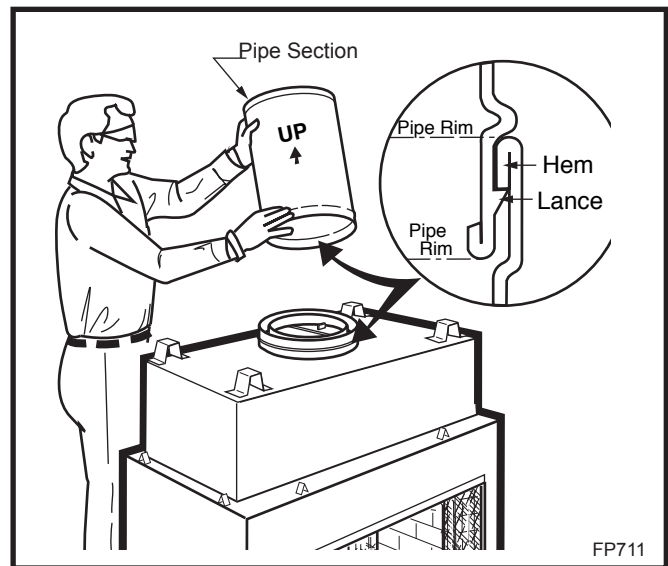


Fig. 16 Install pipe, listening for the snap-lock to fasten.

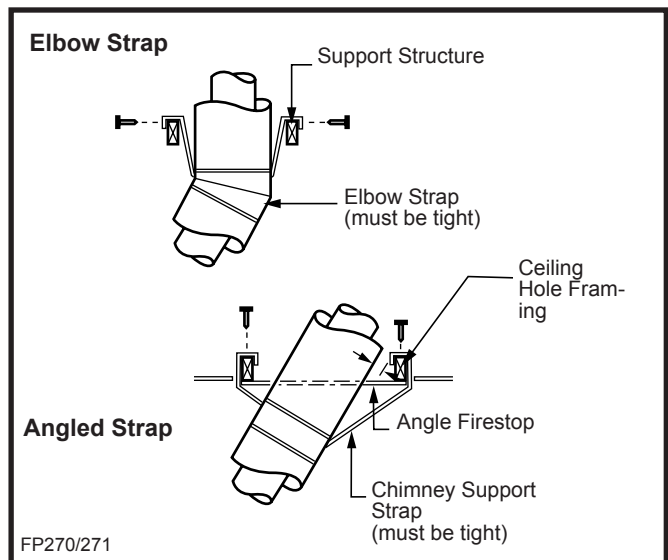


Fig. 17 Attach straps to a structural framing member.

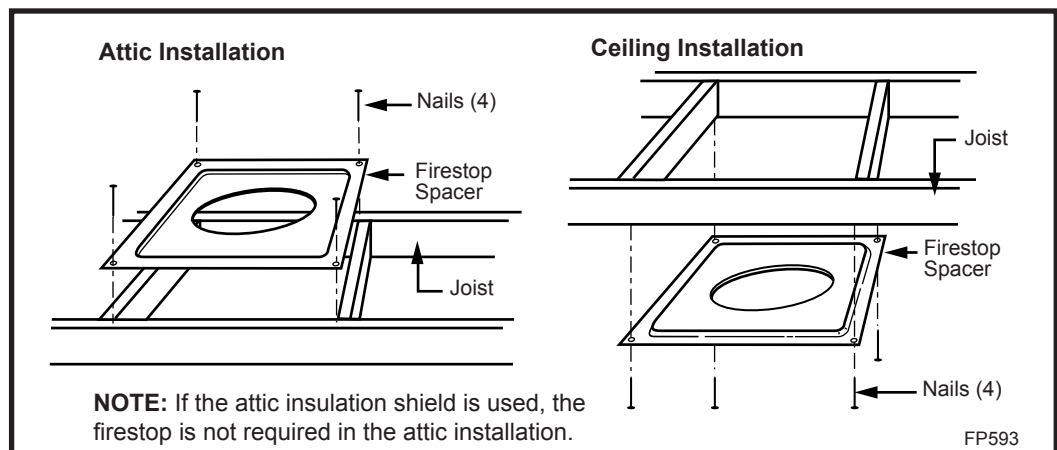


Fig. 18 Installing firestop spacer.

Firestop spacers are not available for nor are they required on vertical walls.

DO NOT put any sealant around the area where the outer pipe slides through the firestop spacer. If you seal this area, it may cause a fire hazard.

Canadian Requirements for Insulation Shield

In Canada, an attic insulation shield is required to prevent attic insulation from contacting the chimney section. **NOTE:** If the attic insulation shield is used, the firestop is not required in the attic installation. Framing dimensions for the chimney hole should measure $14\frac{1}{2}" \times 14\frac{1}{2}"$ (368 x 368 mm). (An attic shield **MUST** be installed on top of attic joists (above the floor level). (Fig. 19)

NOTE: In the U.S., it is a good idea, although not always required, to install an attic insulation shield where blown-in insulation is planned to be used in the attic.

Install the attic insulation shield with the flanges on its base extending down into the framing hole. Nail each corner of attic insulation shield to the framing members of the ceiling hole using 8d nails. Attic shields are not required at the roof.

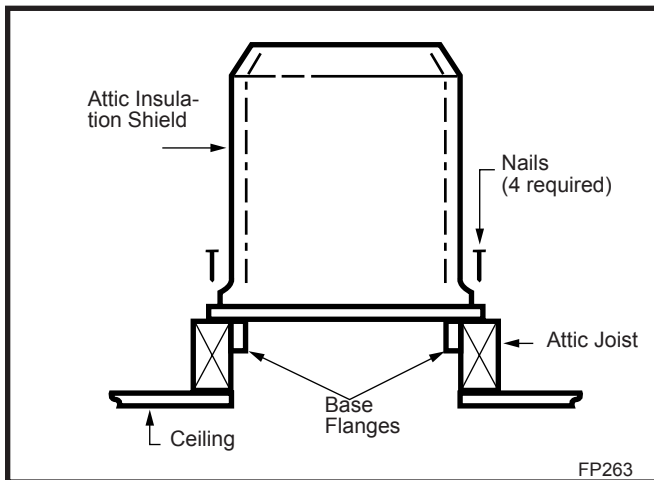


Fig. 19 Attic shield installation (Canadian requirement).

Continue Installing Pipe to Complete Run

Continue attaching pipe sections to complete system to next level always being careful that the pipe is firmly snapped locked in place before proceeding to next pipe section.

Chimney Supports

If chimney supports are required, they are installed the same as elbows. Nail chimney support straps to adjacent structural framing, as shown on Figure 8, Page 8. Bend straps as necessary and make sure they are secure so they will support the weight of the chimney. A chimney support is $2\frac{1}{2}"$ (64 mm) long when installed.

Consider this dimension when determining how many straight chimney sections are needed.

NOTE: Chimney supports are generally used in long runs in a chase installation. **A chimney support cannot be mounted directly to the fireplace.**

Additional Ceilings

If you encounter additional ceilings, repeat same steps required for first ceiling installation. Refer to firestop illustration on Page 12, Figure 18.

Penetrating the Roof

Run pipe to roofline. Since chimney system must be vented to the out-of-doors, you **must** use an approved termination.

If a chase is used, refer to the installation manual provided with the termination cap.

Locate Chimney Centerpoint on Roof

Use same procedure detailed in locating centerpoint of the flue system.

Drive a nail up through roof at the centerpoint. This will determine center point on outside of the roof.

Cut and Frame Roof Hole

Size of roof hole varies with the type of chimney termination installed. Refer to installation instructions provided with the chimney termination to find correct size of roof hole.

There must be an air space ($1\frac{1}{2}"$ (38 mm) with SK8 between outermost portion of chimney sections and any adjacent combustible surfaces. (Fig. 20) (Combustible surfaces include burnable materials such as: ceiling members, joists, flooring, combustible insulation and roof structures.)

WARNING: DO NOT PACK REQUIRED AIR SPACES WITH INSULATION OR OTHER MATERIALS.

Mark an outline of the roof hole around the center of the point nail. **NOTE:** Hole dimensions given in the chimney top installation instructions are **horizontal** dimensions; therefore, the hole size must be marked on the roof accordingly.

Cover the opening of the installed chimney so debris cannot get into the system.

Cut and frame the hole. It is good practice to use framing lumber that is the same size as the rafters. Install the frame securely because the chimney top and flashing anchored to the frame must be able to withstand heavy winds.

Install Remainder of Chimney Sections

Since you have already preplanned the height of your termination according to the *Ten Foot Rule*, continue to install pipe to the predetermined height.

Check the chimney top installation instructions for details on how high above the roof top the chimney sections (all pipes) should extend.

Installing Top Housing or Termination

Follow the installation instructions provided with the chimney termination you have selected.

Installing Chimney In a Chase

Refer to Page 5, Figure 4 for an illustration of a typical chase installation.

CAUTION: Treatment of firestop spacers and construction of chase may vary with type of building. These instructions are not a substitute for local building codes. You **must** check your local building codes to determine specific requirements for your city or state. **NOTE:** Other building materials may be required in addition to Firestop Spacers.

Finishing

CAUTION: All joints between the finished wall and the fireplace surround (top/sides) must be sealed with non-combustible material to prevent cold air leakage into the room. Only noncombustible material may be applied to the facing of the fireplace surround. (Black painted area) (Fig. 20)

Finish Wall

Finish the wall with material of your choice. **Do not install a combustible mantel shelf less than 12" (305 mm) above the front opening. Do not install a mantel face plate less than 6" (159 mm) from top of fireplace opening. (Fig. 21)** If a combustible material is used below a flat mantel shelf, consult your local building codes for minimum clearance from top of fireplace opening to bottom of mantel shelf.

NOTE: No side wall protection is required for fireplaces installed at 45° to two (2) side walls (corner installation). Adjacent combustible side walls that are within 16" (406 mm) of fireplace opening must be protected with a specifically built wall shield as described in Figure 20 & 24. Often a decorative surround or vertical portion of the mantel is desired. If this is constructed of any combustible material, it must be within the safe zone indicated in Figure 24.

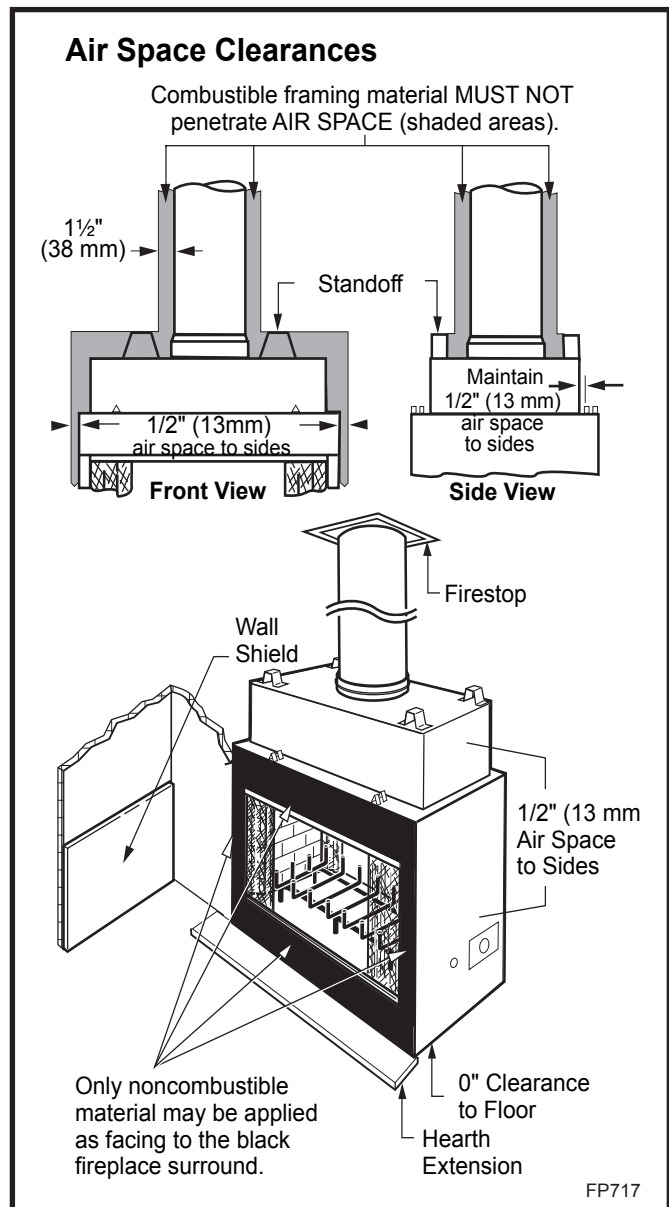


Fig. 20 Minimum clearances to combustibles.

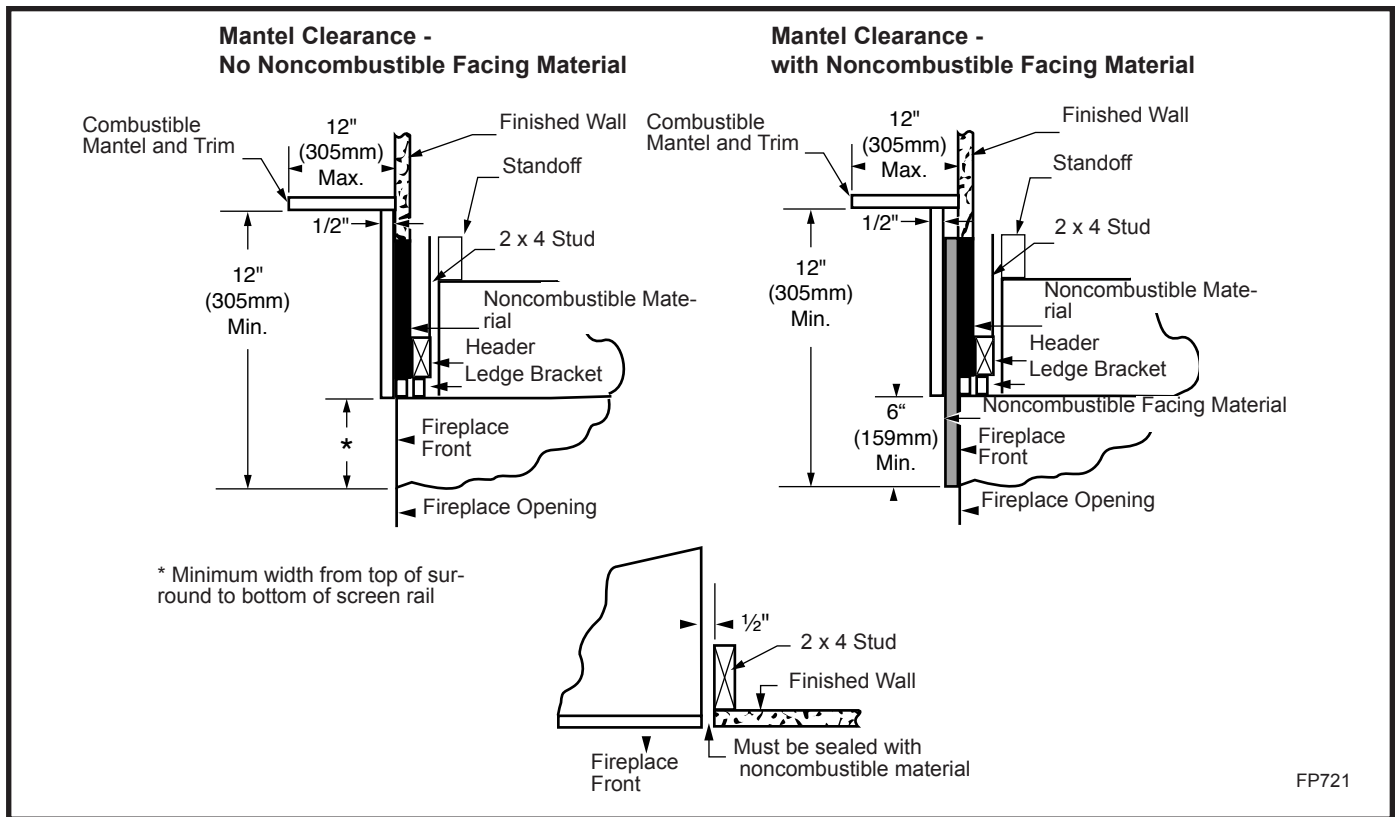


Fig. 21 Fireplace surround flush with finished wall.

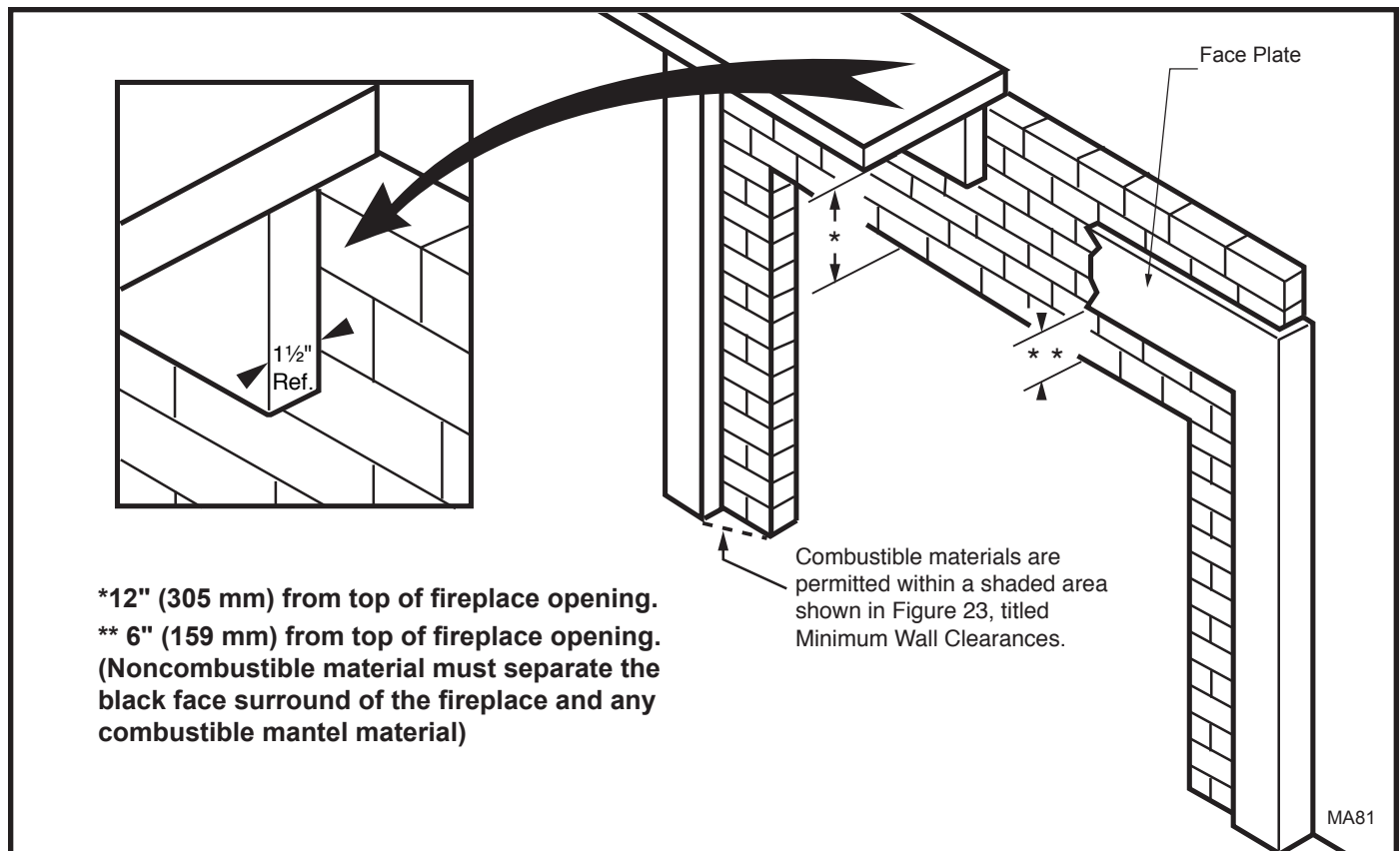


Fig. 22 Combustible mantel clearances.

Side Wall Protection

All joints (top, bottom and sides) where wall or decorative facing material meets fireplace surround must be completely sealed with a noncombustible material. (Figs. 20 and 24)

The special wall shield design described in Figure 20 is an alternate method of adding protection to side walls. Rt must = 1.85 minimum.

Examples of wall shield insulation:

1. Manville - CERAFORM 126, K=.27,
1/2 inches thick
2. MHSC - EH2416, K = .458,
1 inch thick required.

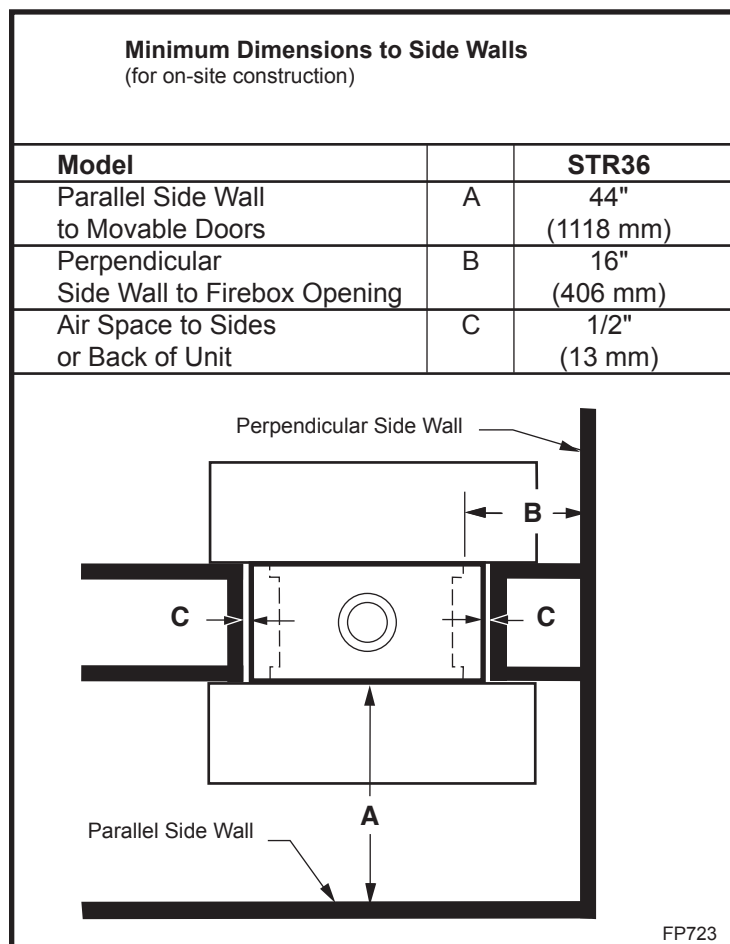


Fig. 23 Minimum firebox dimensions from combustible materials.

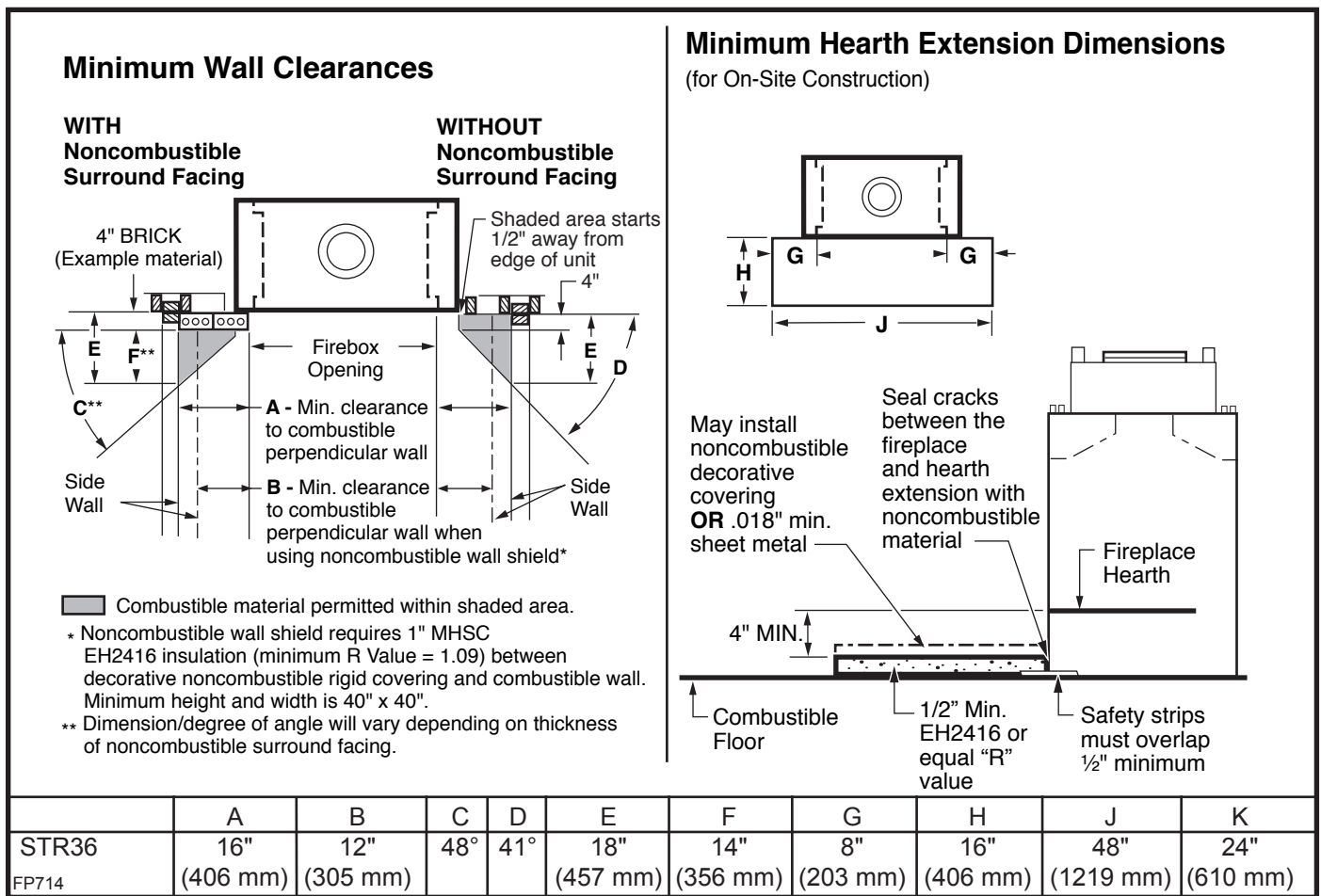


Fig. 24 Combustible side wall protection and hearth extension dimensions.

Hearth Installation

A hearth extension is required to protect a combustible floor in front of the fireplace. Refer to Figure 24 for minimum dimensions and mounting detail.

Note: Hearth Extension must not cover the air inlet opening of a fireplace.

The hearth extension described in Figure 24 must be a durable noncombustible material with a minimum (total) Rt value of 1.09; refer to Figure 25 for examples. The overall height (above a combustible floor), depth and width must be as indicated, with the extension centered to the fireplace opening.

The top of the insulation material must be covered with a noncombustible decorative covering or a piece of .018" minimum sheet metal, to protect hearth extension material. (Fig. 24)

Secure the hearth extension to the floor to prevent shifting, using trim molding or other similar means at three (3) outer edges. Seal crack between the fireplace hearth and hearth extension with a noncombustible material. (Figs. 24 and 26)

WARNING: HEARTH EXTENSION MUST BE INSTALLED IN ACCORDANCE WITH FIGURES 24 AND 25.

Alternate noncombustible materials may be used providing the (total) thermal resistance (Rt value) of the alternate material employed is greater than or equal to $R = 1.09$. Thermal resistance (R) or thermal conductivity (K), may be obtained from manufacturer of the material. Factors are related by the formula $K = 1/R$.

T = given thickness

R = thermal resistance for a given thickness (T)

K = thermal conductivity

Noncombustible material with a lower R value may be used, provided thickness of material is sufficiently greater to maintain an equivalent (total) thermal resistance (Rt).

Example of Determining Hearth Extension Equivalents

To determine the thickness required for any **new** material:

$$\text{NEW required thickness} = \frac{\text{K of new material (per inch)}}{\text{K of listed material (per inch)}} \times \text{thickness of listed material}$$

Example for Common Brick

$T(\text{new}) = 5.0 / 0.458 \times 0.50 \text{ in.} = \mathbf{5.46 \text{ in.}}$ (new required thickness).

COMMON MATERIALS AND FACTORS

MATERIAL	K*	R	MINIMUM THICKNESS
EH2416 Micor 300	0.458	1.09	0.50 in.**
Common Brick	5.0	0.10	5.46 in.**

R Value is for 1/2 inch.
 * Units of K = BTU/SQ FT/HR/°F/IN
 ** Thickness of Listed Material

Fig. 25 Hearth extension material factors.

FP533AD

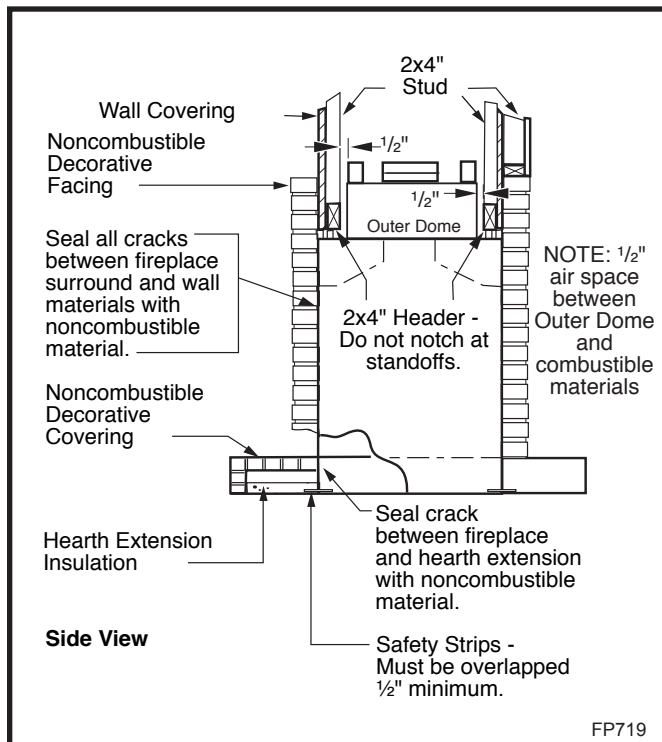


Fig. 26 Finish wall treatments and gap sealing.

FP719

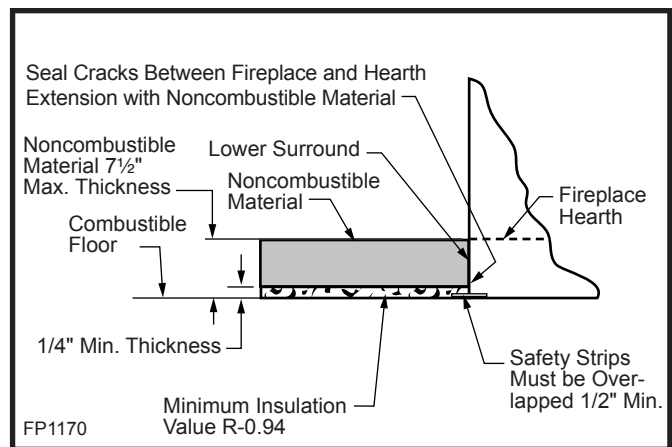
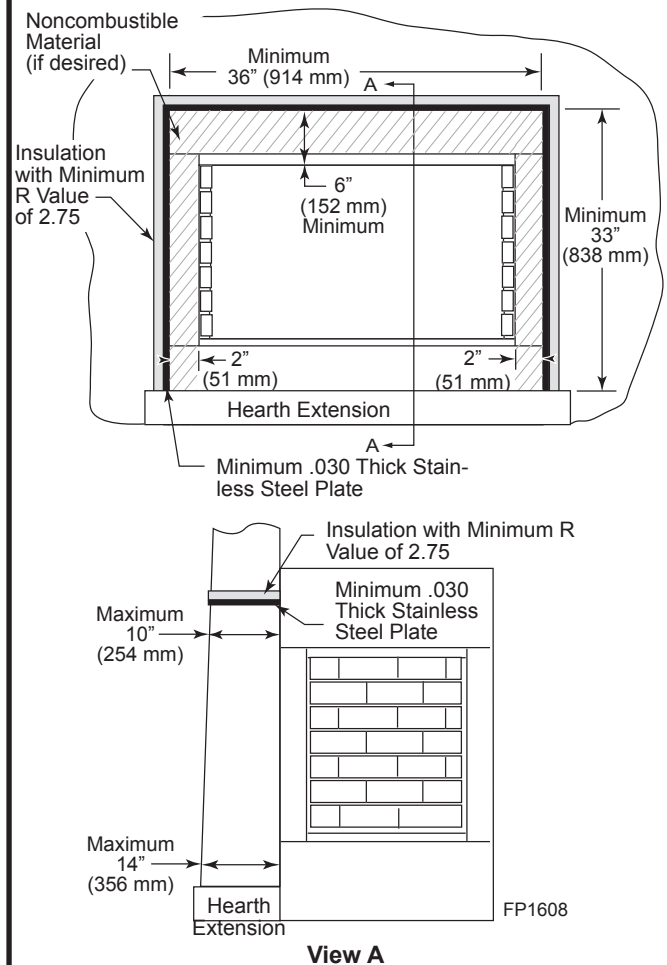


Fig. 27 Hearth extension dimensions.

Recessed Installation - STR33/36 Only



NOTE: If noncombustible material is not used between the stainless steel plate and fireplace opening, the steel must be attached to the front of the unit a minimum of four (4) places on each piece with sheet metal screws no longer than 1/2 inch.

NOTE: The size of the insulation and stainless steel plate must be within limits stated above and covers all combustible framing material.

Fig. 28 Recessed installation.

FP1608

Installing Line for Gas Logs

MHSC are designed to accept a 1/2" (13 mm) gas line for installation of an approved gas appliance. (MHSC manufactures a wide variety of gas logs for use in MHSC fireplaces.)

Be sure to have the appliance installed in accordance with building codes.

Gas connection may enter from either left or right side of the fireplace.

Locate appropriate gas line in the outer casing of fireplace and remove insulation from gas line tube. (Fig. 29)

From inside the fireplace, locate the knockout on the firebrick -- be sure you are on the appropriate or "gas line" side of the fireplace. Using a flat bladed screwdriver or small chisel and hammer, carefully tap around the knockout until it loosens and falls out.

Install 1/2" (13 mm) certified gas pipe through opening. After gas pipe installation is complete, use insulation that was removed from gas line tube to repack space around the pipe. Material should be inserted from outside of the fireplace and packed tightly to totally seal between the pipe and tube.

NOTE: Gas pipe should not come in contact with any wood structures until it has reached a point at least 1" (25 mm) away from fireplace side.

Note: Local codes may require removal of flue damper when installing any type of gas appliance in a fireplace.

NOTE: When installing an ANSI Z21.11.2 ventless appliance, the finishing material used for the mantel must be rated at 250°F or greater.

BTU input of a gas appliance installed in fireplace should be rated less than 100,000 BTU/Hr.

Gas pipe installation is intended for connection to a decorative gas appliance only when (1.) incorporating an automatic shutoff device and (2.) complying with the Standard for Decorative Gas Appliances for Installation in Vented Fireplaces (ANSI Z21.60) **or** CSA draft requirements for Gas-Fired Log Lighters for Woodburning Fireplaces (Draft No. 4, August 1993).

Decorative gas appliance should be installed in accordance with the National Fuel Gas Code, ANSI Z223.1/ NFPA 54 (latest edition).

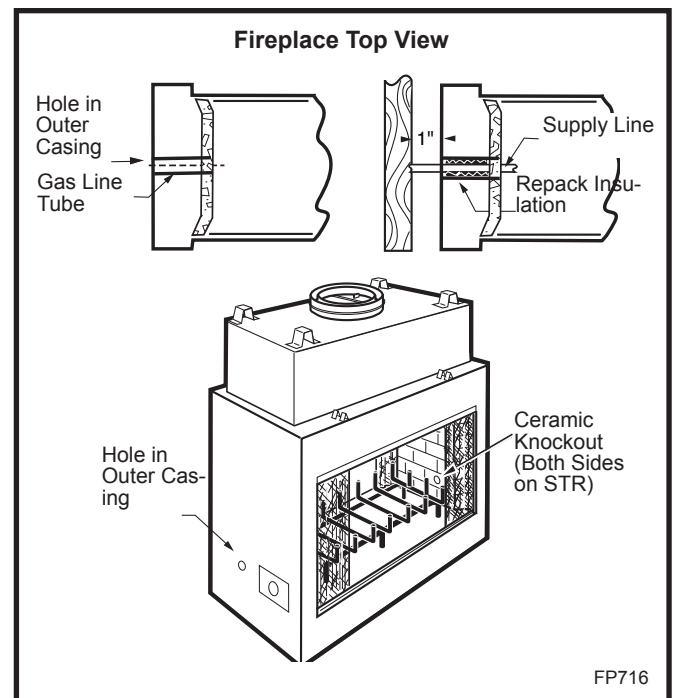


Fig. 29 Gas line access.



CAUTION: WHEN USING DECORATIVE GAS APPLIANCE, FLUE DAMPER MUST BE SET IN FULLY OPEN POSITION. IF YOU HAVE GLASS DOORS ON THE FIREPLACE, THEY MUST ALSO BE FULLY OPENED.



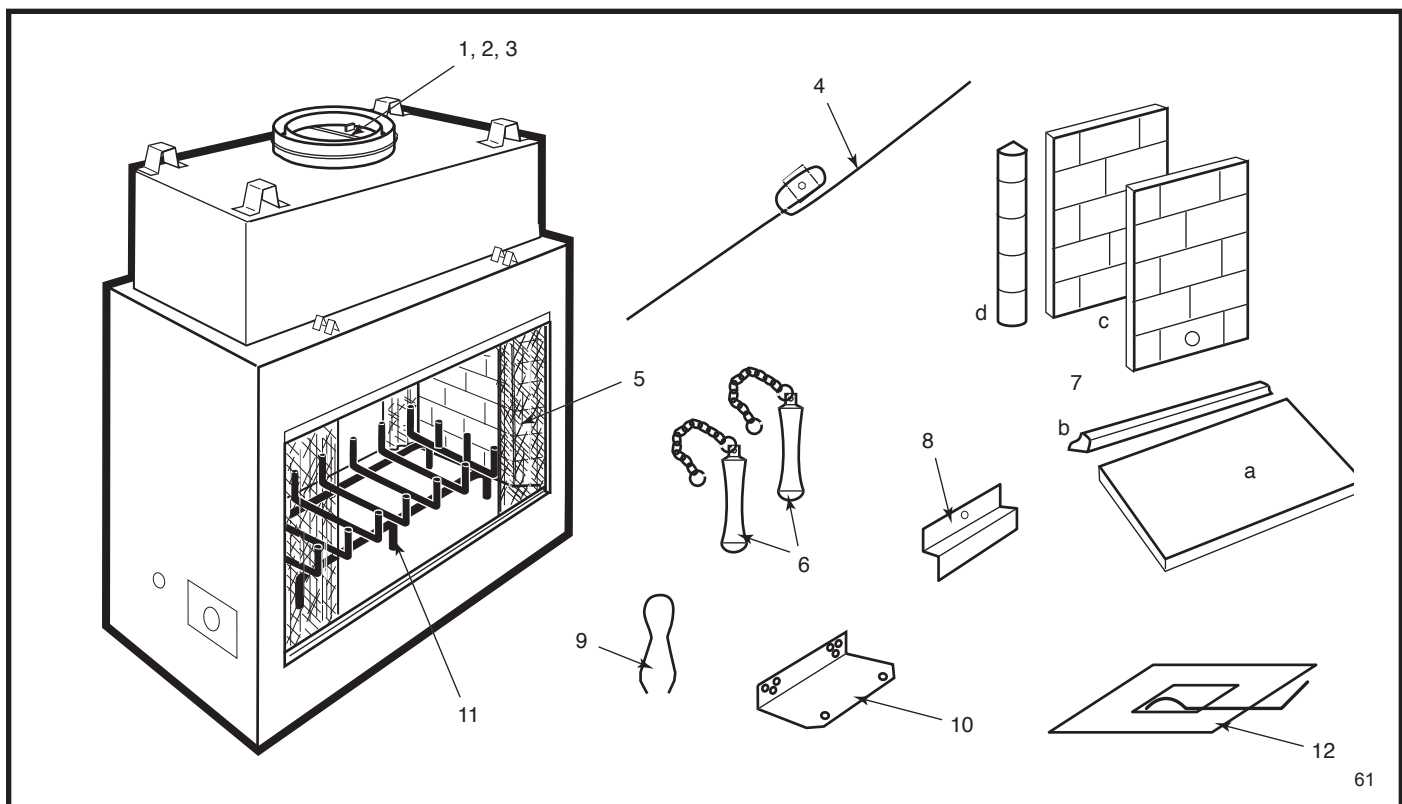
WARNING: DO NOT OPERATE AN UNVENTED GAS LOG SET IN THIS FIREPLACE WITH THE CHIMNEY REMOVED.



WARNING: WHEN INSTALLING AN UNVENTED GAS LOG SET, THE MHSC MODEL CABL OR CABR 4" ADJUSTABLE HOOD MUST BE USED.

If installing an unvented gas log set, refer to statement below:

Only unvented gas log sets which have been found to comply with the Standard for Unvented Room Heaters, ANSI Z21.11.2, are to be installed in this fireplace.



MHSC reserves the right to make changes in design, materials, specifications, prices and discontinue colors and products at any time, without notice.

STR36 Woodburning Fireplace

Ref.	Description	STR36
1.	Flue Damper	RP102
2.	Damper Handle	7548170
3.	Damper Handle Push Nut	7512903
4.	Screen Rod Assembly (two per fireplace)	3030126
5.	Screen Assembly (four per fireplace)	7554338
6.	Screen Pulls (four per fireplace)	5584139
7a.	Firebrick - Hearth	3102103
7b.	Firebrick - Side Ashlip (two per fireplace)	3102102
7c.	Firebrick - Side (two per fireplace)	9079147
7d.	Side Filler (four per fireplace)	3079148
8.	Top Brick Retainers (four per fireplace)	3079130
9.	Cable Clips (eight per fireplace)	7512135
10.	Nailing Flange (eight per fireplace)	5069164
11.	Basket Grate	2056100
12.	O.S.A. Assy.	20003212

Accessories

The following accessories for this appliance are available from your local MHSC distributor. Should you need additional information beyond what your distributor can furnish, contact: MHSC, 149 Cleveland Drive, Paris, KY 40361, Attn: Technical Services.

CAUTION: This fireplace and chimney assembly is a highly engineered system, and, as such, must be operated only with MHSC approved components. If you use an unapproved component to make any modifications, you may create a possible fire hazard and will void the MHSC warranty. In addition, such action may void the coverage provided by the owner's insurance.

Accessory	Description		Model Number
Glass Door	Bi-Fold door set	Brushed Brass finish	36GDKBB - STR36
		Black finish	36GDKBK - STR36
		Polished Brass finish	36GDKDP - STR36
		Pewter finish	36GDKS - STR36
Outside Air Termination	Completes connection from air kit to out-of-doors		AK-MST
Hearth Extension Insulation	Provides hearth extension floor protection		EH2416
Basket Grate	Holds firewood in firebox		RBG36ST
Hearth Patch Compound	Patch cracks in hearth		HPC-1

Contact your MHSC distributor or dealer for finishing Marble and Mantels, available in a wide selection of styles.

Chimney Components

U.S.

Component	Description	Model Number
Round Top Termination	Round termination to be used with SK8 chimney system. (Flashing not included.)	RLTSK8
Long Round Top Termination	Round top to be used with a chase installation utilizing SK8 chimney system.	RLTSK8L
Knock-down Shroud - Pyramid	Black pyramid knock-down shroud used for chase installations with any RLT round top termination. Gives appearance of a pyramid cap.	PKDSBL
Knock-down Shroud - Square	Black square knock-down shroud used for chase installations with any RLT round top termination. Gives appearance of a square cap.	SKDSBL Adaptor required
Square Termination	Top housing with simulated brick pattern. (Red, Tan or Black) Proper adapter must be used. Includes flashing.	T20B
Adapter	Required adapters for T20B top housing.	CF8CA (SK8)
Housing Extensions	Extends Square Termination on steep pitched roofs.	202036
Flashing	Metal finishing required around Contemporary Termination to prevent rain leakage.	8-6-12 with 8" flue: 0-6/12 pitch 8-12-12 with 8" flue: 6/12-12/12 pitch
Square Termination	Top housing of simulated brick pattern available in red, tan or white. Appropriate adapter required. Flashing included.	T20B
SK8 Chimney Sections	Pipe used to build 8" SK8 flue systems.	SK81 (1' Long) SK818 (1½' Long) SK83 (3' Long) SK84 (4' Long)
Chimney Elbows	Elbow used to create an offset in a chimney system. Only 30° elbows available. Packaged 2 per carton (offset and return).	SK830 / 2 (SK8)
Firestop	Required at each floor level of chimney installation. (Plus attic on multi-story installation.)	SKFS2A — SK8 (8" straight flue) SKFS6A — SK8 (8" 30° inclined flue)
Chimney Support	Used to support chimney for each of: 20' vertical height and 6' of angled chimney run.	SKCS8 - SK8
Attic Insulation Shield	Used to prevent insulation from coming in contact with the chimney system.	AIS-SK - SK8

Canada

Component	Description	Model Number
Attic Insulation Shield	Used to prevent insulation from coming in contact with the chimney system.	AIS-SK - SK8
SK8 Chimney Sections	Used to build chimney systems exposed above roof.	SK818CAN (1½') SK8 SK84CAN (4') SK8
45° Chimney Elbows	Provides 45° offset and return. FOR CANADIAN INSTALLATIONS ONLY. For use with SK8 chimney only. (Maximum use of 2, or 1pair.)	SK845/2

LIMITED WARRANTY

Factory-Build Fireplace and Components (Except Blowers)

What is Covered and For How Long

Five-Year Coverage: For five years from the date this fireplace and components are first purchased for use, MHSC will, at its option, repair or replace any defective part of this fireplace or components, or refund to you a sum not to exceed the factory retail price in effect at the time of purchase.

Ten-Year Coverage: From the sixth through the tenth year following the date this fireplace or accessory is first purchased for use, MHSC will make available to you, at our factory, a free replacement for any defective part in this fireplace or accessory.

Twenty-Five-Year Availability of Replacement Parts: From the eleventh through the twenty-fifth year following the date this fireplace or accessory is first purchased for use, MHSC will make available at our factory replacement parts for this fireplace or accessory, which you may purchase for the list price current at the time your purchase order is received.

What is Not Covered

- This limited warranty does not cover:
- Transportation or shipping cost.
- The cost of a service call to diagnose trouble.
- Painted surfaces.
- Damage or defect caused by improper installation, accident, misuse, abuse or alteration.
- Poor ventilation of smoke or gases caused by air-conditioning and heating systems, exhaust fans, or pressure differentials produced by wind.
- Broken glass components.
- Cracks in ceramic and castable parts that do not affect safe operation.
- We do not warrant this fireplace to be in compliance with your local building code. Building codes vary greatly throughout the country, and you should determine whether your local building code contains restrictions on the use of this fireplace before you purchase it.
- Blowers or fans, which are warranted separately.
- Heat loss due to the passage of heat or air through or around the fireplace.

Also, under our five year coverage, we do not pay the cost of removal and replacement of any portion of the structure in which the fireplace is situated, made necessary by the repair, removal or re-installation of the fireplace.

And under our twenty-five year warranty of availability of replacement parts, we only promise to maintain a supply of replacement parts at our factory for you to purchase.

Limitations and Exclusions

1. No one has authority to add to or vary this limited warranty, or to create for MHSC any other obligations of liability in connection with this fireplace and accessory.
2. MHSC shall not be liable for incidental, consequential, special or contingent damages you might suffer as a result of its breach of this written warranty or any implied warranty. Some states do not allow the exclusion of limitation of incidental or consequential damages, so the above limitations may not apply to you.
3. This warranty applies only to a fireplace sold and used in the United States.

IF WARRANTY SERVICE IS NEEDED...

1. Contact your supplier. Make sure you have your warranty, your sales receipt and the model/serial number of your MHSC product.
2. DO NOT ATTEMPT TO DO ANY SERVICE WORK YOURSELF.

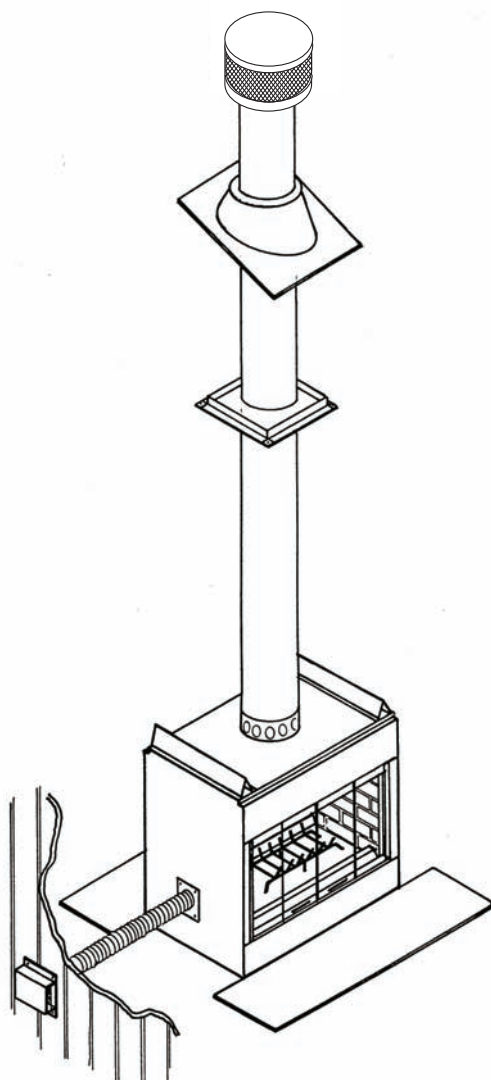
MHSC

149 Cleveland Drive • Paris, Kentucky 40361
www.mhsc.com



Woodburning Fireplace Model: SSTB11

Installation, Operation and Maintenance Manual For Residential or Manufactured Home Installation



This fireplace is listed by OMNI-Test Laboratories for use with "11CF" Series Chimney System Components.

Congratulations!

You have chosen the finest wood burning fireplace available. Your fireplace has been designed for years of heating and viewing enjoyment. Please take time to read this entire manual before installing or operating your fireplace.

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Listing And Code Approvals

The instructions contained in this manual provide the information necessary to install this fireplace in accordance with Underwriter's Laboratories requirements and in compliance with the National Fire Protection Association Standard No. 211. Some codes may require the fireplace and chimney be electrically grounded. Before beginning the installation, you should check with local building officials to obtain required permits and assure compliance with local regulations and coded. If you encounter problems with code requirements, contact your dealer for assistance.

These Fireplace models are listed by OMNI-Test Laboratories, Inc. to U.L. 127-standard for factory-built fireplaces. The design of this fireplace and these instructions complied with applicable safety standard for a factory built fireplace in effect at the time the fireplace was manufactured. You should be aware, however, that failure to install, operate, and maintain this or any other factory built fireplace properly can result in a house fire or other occurrences that could cause deaths, injuries, and property damages. It is very important that the persons installing and/or supervising the installation of this fireplace have appropriate skills in using the tools and techniques required; and reading and comprehension skills sufficient to read and follow these instructions. These instructions contain warnings, cautions, and notes to emphasize important safety information. To assure that safe and satisfactory service is received from this fireplace, please read the following special notices and all the contents of this manual.

SSTB11
listed by OMNI-Test Laboratories to ANSI/UL 127 / ULC-S610 Standards for Factory-built Fireplaces

Installer

Please leave these instructions with the owner.

1. Read these instructions entirely before beginning any part of the installation. Save these instructions for any future repairs.
2. Use these instructions as a guide during the installation of the fireplace.
3. Be sure these instructions become the property of and are reviewed by all future users of this fireplace to encourage proper operation and maintenance.
4. All the parts used with this fireplace system must be installed in accordance with these installation instructions. Failure to do so may be hazardous and will void the warranty.
5. This fireplace and accessories should not be altered in any way that is not specifically recommended in this manual.
6. Refer to your local building code for local requirements pertaining to installation of factory-built fireplaces. These fireplaces are intended for installation and use according to standard NFPA NO.211 of the National Fire Protection Association.
7. This fireplace must not be installed with a masonry flue.
8. This fireplace and chimney should not be used for venting a wood or coal burning heater or fireplace insert.
WARNING: Do not install a separate solid fuel insert or gas fireplace insert into this fireplace and chimney system without written authorization.
9. **WARNING:** Do not pack required air spaces with combustible material or insulation not specifically recommended for use in such areas.

Improper Installation

Improper installation or use of this fireplace will void the warranty and can cause:

1. Damage to the fireplace from overheating.
2. Hazardous temperatures to develop on combustible materials adjacent to the fireplace or chimney.
3. The emission of smoke, sparks or hazardous gases into the dwelling.
4. Leakage of rain water into the dwelling.

Owner

Please retain these instructions for future reference.

Intended Product Usage

The fireplace is designed to sit directly on a combustible floor. The fireplace must be installed with zero clearance to combustible building materials at the side and top spacers. Only parts manufactured by MHSC and labeled for use with the fireplace should be used in the installation of this fireplace except for special roof flashings that may be fabricated locally. The use of improper parts in the installation can be hazardous and voids the warranty offered by MHSC.

This fireplace is designed to burn wood. This fireplace is not designed to burn coal, unplumbed liquid fuels, unplumbed gaseous fuels or household refuse. Any attempt to burn these fuels in the fireplace can be hazardous.

This fireplace is not designed for installation in a manufactured home without a vented attic space. In a vented manufactured home, an MT16 ceiling thimble, glass doors and an AK6 outside air kit must be used.

WARNING: This fireplace and chimney must not be used for venting a solid fuel heater or fireplace insert unless written authorization is given by MHSC. Failure to heed this warning may cause a fire hazard and will void the warranty.

This fireplace is intended for supplemental heating only and is not intended for use as a primary heating system.

Use solid wood, plumbed propane (LP) or Natural Gas fuel only.

Do not use a fireplace insert or other product not specified for use with this fireplace.

Fireplace also for use in mobile homes with solid fuel only.



As wood is burned in this fireplace, room air enters the side vents of the SSTB11 and circulates around the firebox. This air circulation cools the firebox and must not be blocked or restricted in any manner. Blocking the airflow can cause a fire hazard.

When an AK4 combustion air assembly and a combustion air duct are attached to the connecting point on the left or right side of the fireplace, combustion air may enter the firebox through a dampered opening behind the left or right side brick. This feature is designed for your benefit to reduce the room air used for combustion and to prevent excessive loss of heat from the room. When the fireplace is in use, this damper should be open. When the fireplace is not in use, the damper should be closed to prevent cold air from entering the firebox. The combustion air damper is open when the lever, located on the left and right side of the firebox near the top of the firebrick, is up and closed when the lever is down.

Outside air for combustion is optional unless required by federal, state or local building codes. See the section of this manual providing the instructions for installation of the combustion air assembly. The design of the fireplace allows the routing of the combustion air duct up, down, or horizontally to obtain the outside combustion air. This permits flexibility in planning your installation. Refer to *Page 19, Figures 24 & 25* for typical installation methods. Review the precautions and recommendations in this manual pertaining to outside combustion air installation.

The fireplace is also equipped with a flue damper, which must be open when the fireplace is in use. The flue damper control lever is located inside the fireplace. The counterweighted damper is operated by simply pushing up to open or pulling down to close the damper. When the fireplace is not in use, the damper should be closed to prevent cold air from entering the chimney as well as preventing warm air in the room from escaping up the chimney.

NOTE: It is normal for a small amount of smoke to be released from the upper portion of the fireplace the first few times you use your new fireplace. This results from an oil residue on the metal. Open a door or window to allow the smoke to escape.

The grate included with this fireplace helps to appropriately locate and contain the burning wood. Failure to use this grate may cause overheating of parts of the fireplace and allow large pieces of burning wood to roll forward out of the firebox. If the grate becomes warped or damaged, it must be replaced with grate number 072954 only.

WARNING: Fireplaces equipped with doors should be operated only with the doors fully open or doors fully closed. If doors are left partly open, gas and flame may be drawn out of the fireplace opening, creating risks of both fire and smoke.

All fireplace chimneys are in direct contact with cold air on the exterior of the structure. Consequently, when the fireplace is not in use, cold air can fall down the chimney of the fireplace to cool off the fireplace chase. Therefore, the fireplace chase must be insulated to minimize the risk of cold air infiltration to the home. Even if the fireplace chase is adequately insulated, this cannot completely ensure that cold air infiltration into the structure will be eliminated. Cold air infiltration is a possibility with any fireplace or device that freely communicates with the air on the outside of the structure. Today's homes are more energy-efficient and, therefore, better insulated and tightly constructed. Unfortunately, when air is removed from the house, as by a bathroom fan, or consumed by a furnace, additional air is needed to replace the air consumed. Unless the additional air is supplied, this can cause a negative pressure in the home. When this happens, the house will draw in outside air from the cracks in the windows, down the fireplace flue or other locations of air leakage in the home. Because cold air infiltration may be unavoidable in some structures, MHSC is not responsible for heat loss or air infiltration through or around the fireplace.

WARNING: Due to the fact this fireplace has two (2) openings, it is more susceptible to the adverse effects of drafts or pressure changes in the room or rooms it serves. The fireplace should be operated with both sets of doors closed to prevent smoke or flame spillage out of the fireplace openings caused by drafts or pressure changes. The door should only be opened during the very brief period to add wood to the fire or to remove ashes. Refer to *Page 25, Figure 31*

The Problem

Depressurization (negative pressure) is caused by the interaction of air where small differences in air pressure between indoors and outdoors (pressure differentials) amounting to no more than .0001 atmosphere creates a 'stack effect' - the tendency for air to rise whenever it is warmer than the surrounding atmosphere.

The stack effect is the working principle of all chimney systems. Heated flue gases rise up the chimney and vent into the atmosphere pulling cooler air behind it to fill the void. Therefore, when the air is warmer indoors than outdoors, air tends to flow in through the lower part of the structure and out through the upper part. Air turnover is accomplished by infiltration through various openings and in particular around windows and doors, penetrations created for pipes and wiring as well as fireplaces, water heaters and furnace flue pipes. If a person would measure the flow of air inside a typical home, he would be amazed at the amount of movement that occurs even though the condition is not generally noticeable.

Based on the 'stack principle', the house itself acts as if it were a short, fat chimney with air moving from the bottom of the structure to the top.

Typical Scenario

If we take an example of a typical home with its natural stack effect and add weather proofing which makes a structure even tighter, place vents in the structure for exhaust fans for bathrooms and stoves, add a large attic fan plus flues required for venting water heater, furnace and fireplace gases, we create an opportunity for a great air tug-of-war.

During winter months, the air within the home is generally much warmer and less dense than the outside air and, as a result, the cooler outside air seeks ways to work into the structure. The easiest link to the interior of the home is generally through flues and other openings connected directly to the inside.

A typical comment comes from the person who states, "I don't seem to get a good draft and when I open my damper, cold air rushes in." In this case you are immediately tipped off to the probable cause of the problem - depressurization. The flue system is simply a conduit through which incoming air is drawn into the home to equalize pressure.

Depressurization is a contributing factor to back drafting 75% of the time and is the sole cause of back drafting 40% of the time. The greater the exhaust capacity and the tighter the building envelope, the more a house will depressurize.

The combination of forces of exhausting air from the house can be so strong that it is possible for hot flue gases from the fire in the fireplace to be overpowered resulting in a down draft during or at the end of the fire cycle. The com-

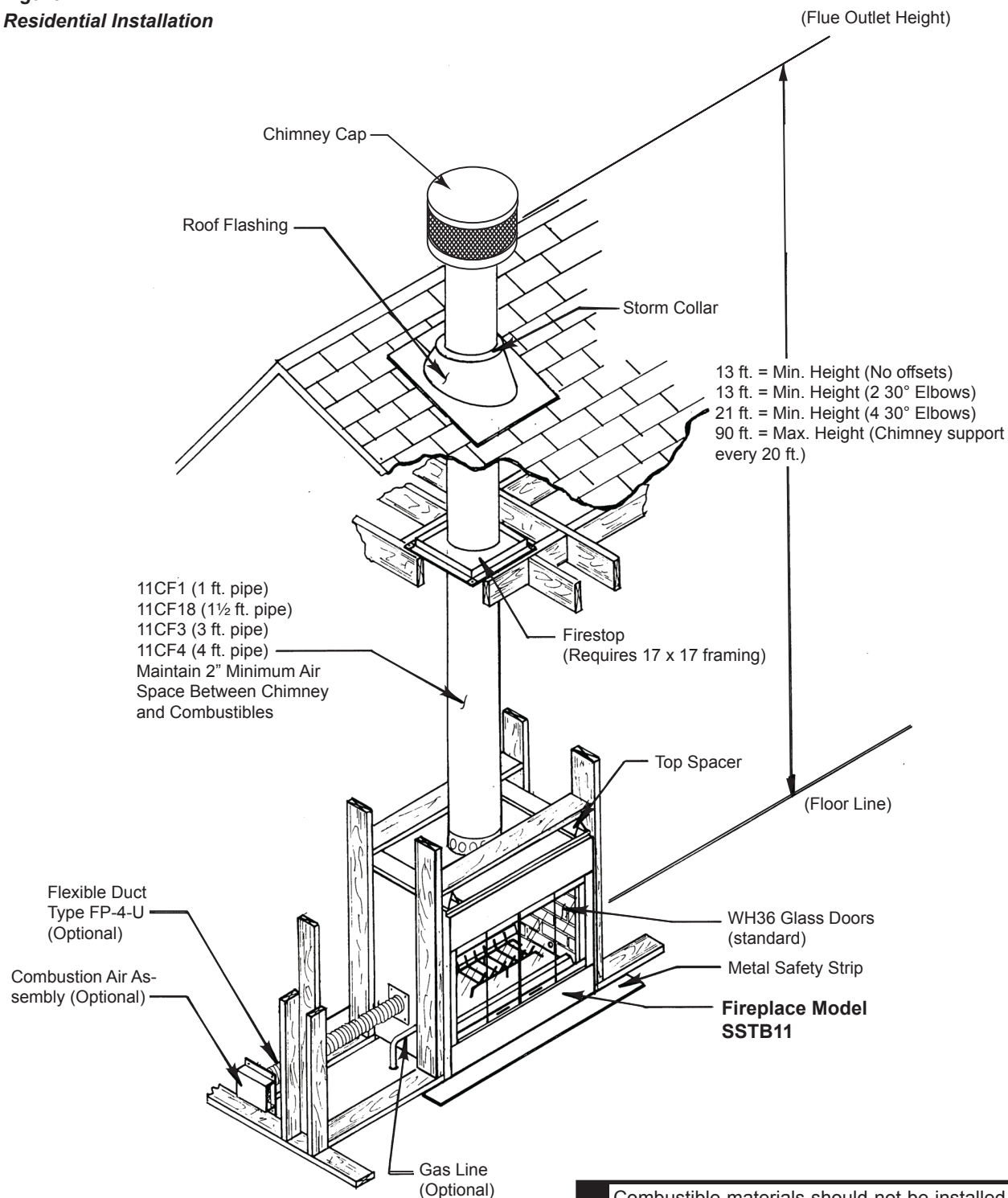
peting factors are the exhaust devices located throughout the home which work in concert with the natural draw of the house causing a depressurized environment pulling at the bottom of the chimney, thereby reducing the net chimney draft.

Air is pulled down the chimney where it provides make-up air (replacement air). The cool back drafting air coming down the chimney will not allow all of the hot combustion gases to rise up the chimney, therefore, chimney drafting is curtailed resulting in the escape of gases and smoke into the living area.

It doesn't take a lot of activity to create a depressurization effect. For example, a typical gas furnace requires 1,450 cubic feet of air per hour for proper combustion and another 4,000 cubic feet of air per hour to maintain a draft. All this air has to come from somewhere.

A surprising amount of outdoor air manages to leak into a house by infiltration but the point is, infiltrating air can not be depended upon as a reliable source of combustion air. Add to this factor a fireplace that needs combustion air to operate in a properly insulated, air tight home and you quickly realize how a problem can occur.

Figure 1
Residential Installation



NOTE

Combustible materials should not be installed below top spacer. Noncombustible materials such as brick or tile may be used to trim face or the fireplace, combustibles must not overlap the black painted face of fireplace more than 1/8".

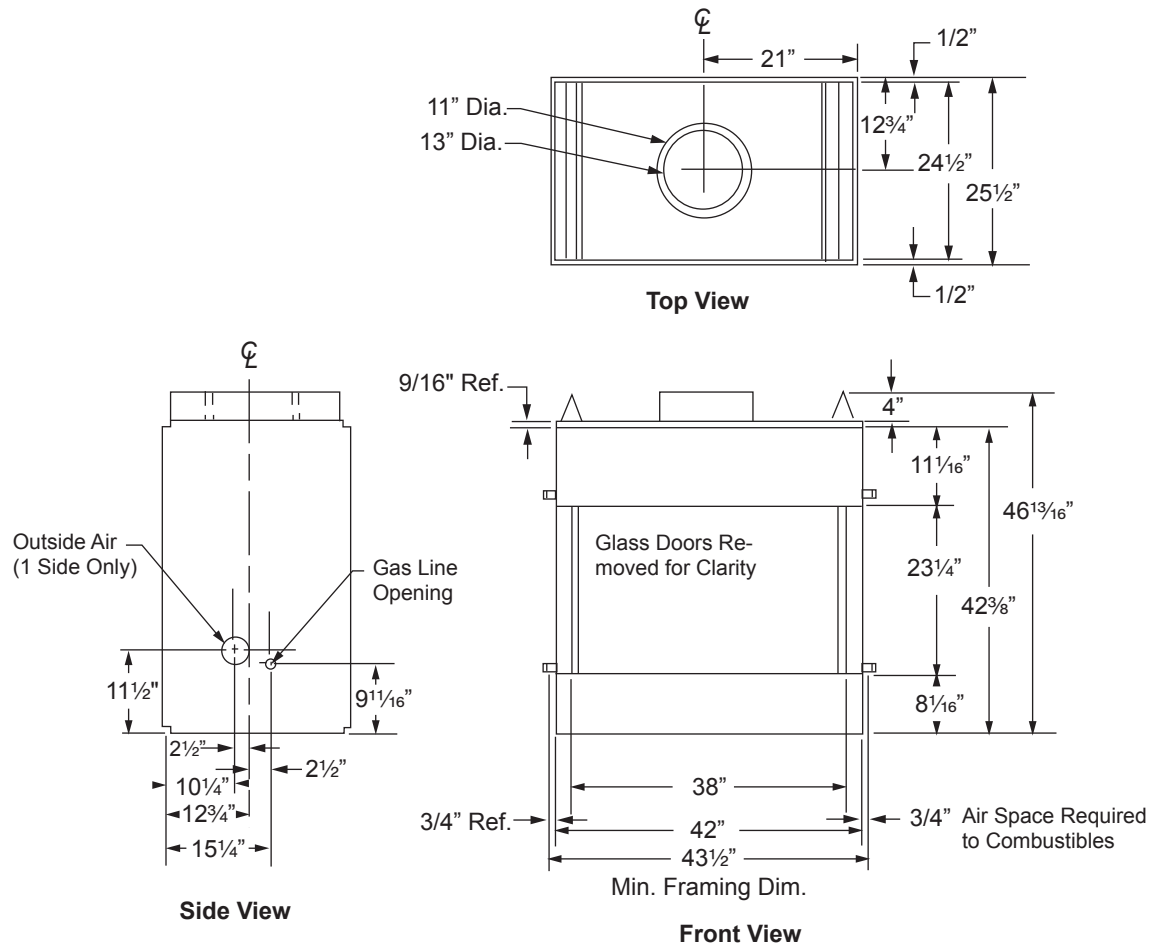


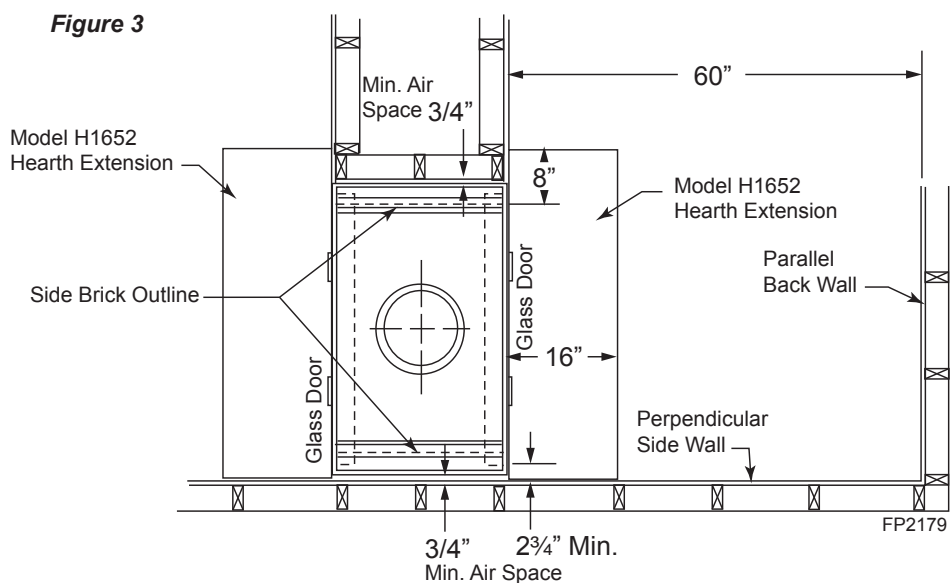
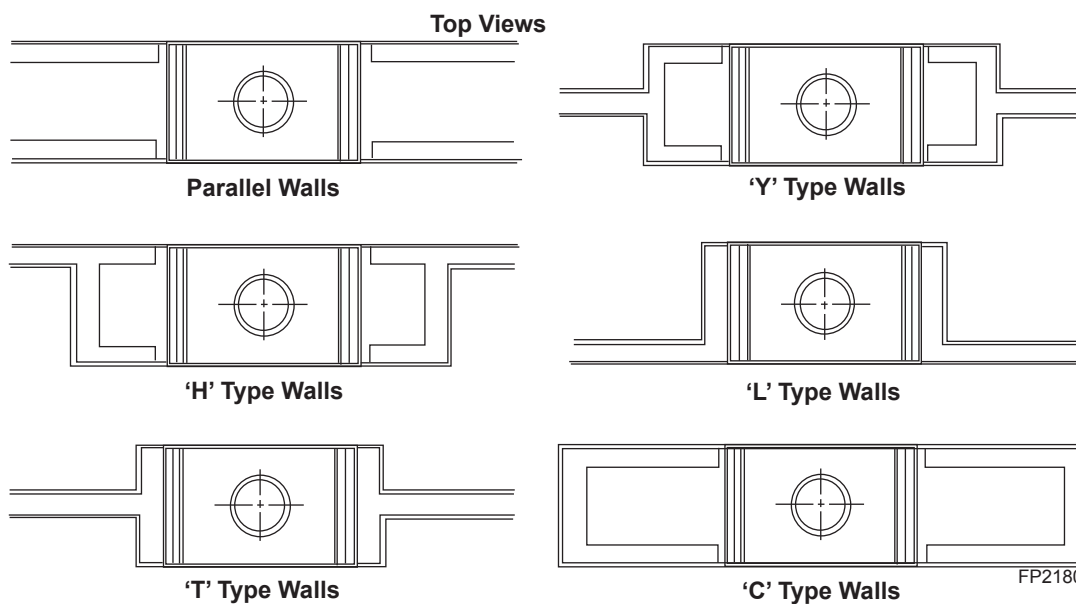
Figure 2

This fireplace does not weigh more than large pieces of furniture and can normally be located near a load bearing wall without requiring additional foundations or supports. If however, the fireplace is to be trimmed with a heavy stone or brick facing and hearth extension, be sure the supporting structure is adequate.

Figures 3 and 4 provide dimensional details of the fireplace, required spacing to combustible walls, and some suggested fireplace locations. When selecting a location, choose one that is away from frequently opened doors, central heat outlets or returns, or other places where air movements may disturb the airflow around the fireplace. Air turbulence near the fireplace may cause smoke to spill out of the fireplace opening.

CAUTION

Do not install fireplace over carpeting.

**Figure 4**

Survey the planned location for the fireplace for overhead plumbing or electrical wires, etc., that might complicate the installation or endanger persons installing or cleaning the chimney. Avoid a location where the chimney cap will be near abrupt changes in the roof shape, nearby wall or embankments, under or near trees or above the roof of a single story wing of a two story building as shown by *Figure 6*. All these conditions can cause turbulence or pressure conditions that can cause poor chimney draft and smoke spillage from the fireplace opening. Elbows may be used to offset the chimney to avoid obstructions or to locate the chimney cap in a preferred location. Refer to the sections of this manual pertaining to chimney offsets for instructions on proper elbow use. Poor installation or location of the chimney cap and/or components can cause wind blown rain to enter the chimney.

Be sure the selected location will allow a 17" square combustible material-free space for the chimney to pass through. If the chimney is to pass through living or storage spaces, be sure there is adequate space to enclose the chimney to avoid personal contact with, or damage to, the chimney.

Figure 5
Single Story Installation with Attic Space

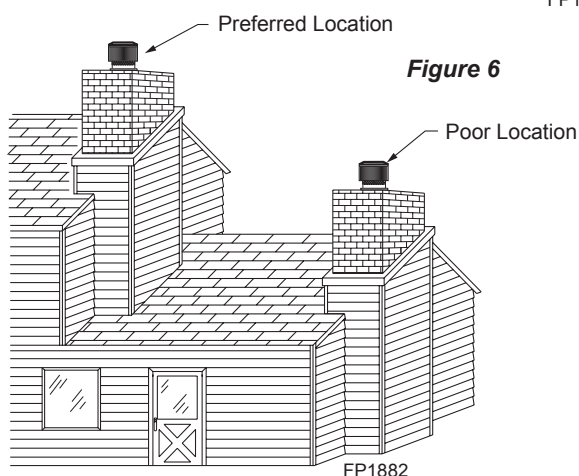
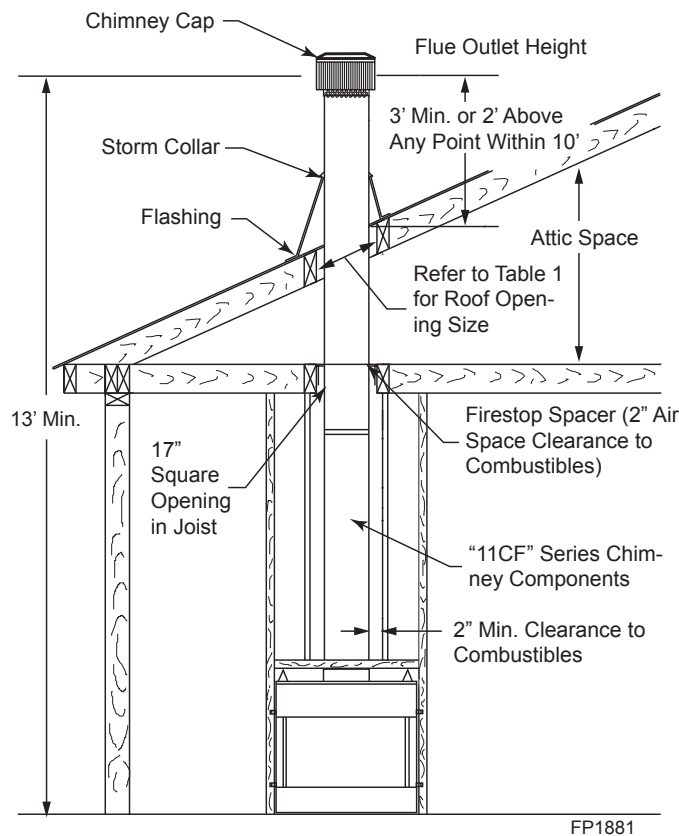
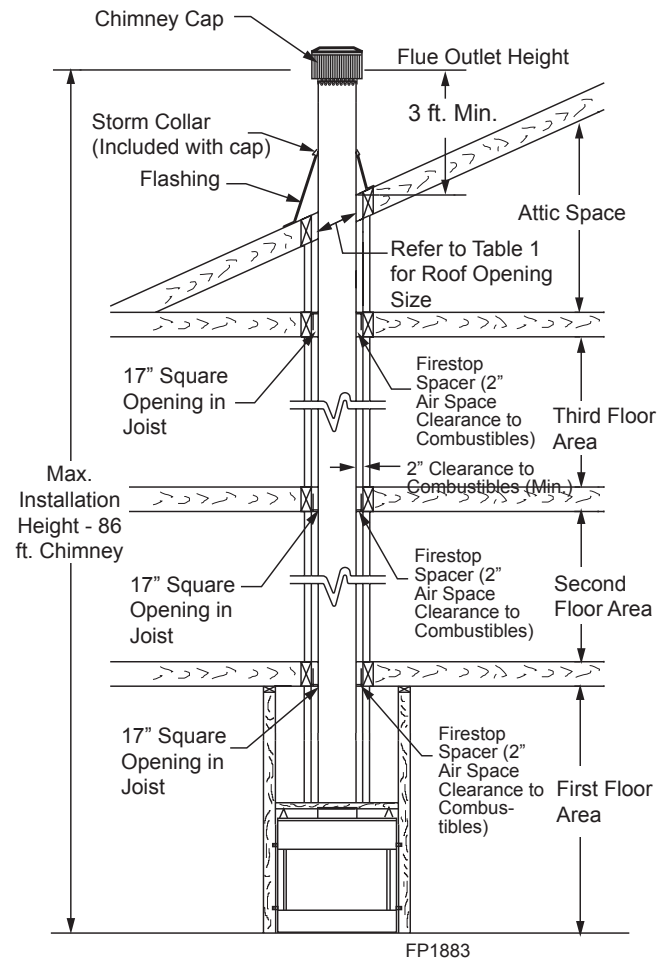


Figure 6

Figure 7
Multiple Story Installation



If this fireplace is installed on a combustible floor, the floor area 16 inches in front of, and 8 inches either side of the fireplace opening must be protected by an insulating noncombustible hearth extension. *Figure 8*

With either type hearth extension minor shifting of the supporting floor or expansion and contraction may eventually cause a crack to develop between the hearth extension and the face of the fireplace. To help prevent the crack from developing, the hearth extension materials must be firmly fastened in place. Wall ties should be screwed to the face of the fireplace and imbedded in the mortar joints of brick, stone, or other non-combustible materials. The metal safety strip packed with the fireplace must be placed beneath the fireplace and extended under the hearth extension or into a mortar joint of the hearth extension as shown by *Figure 9*. In the event a crack does eventually develop, the metal safety strip will serve as a barrier to prevent sparks or embers from falling from the fireplace onto combustible flooring materials.

NOTE: If noncombustible hearth extension materials are to be placed at or below the level of the bottom of the fireplace, insulation board is not required.

If the fireplace is recessed into the floor or the hearth is elevated with combustible materials, an MHSC H1652 hearth extension kit or equivalent must be used for additional protection.

Figure 8

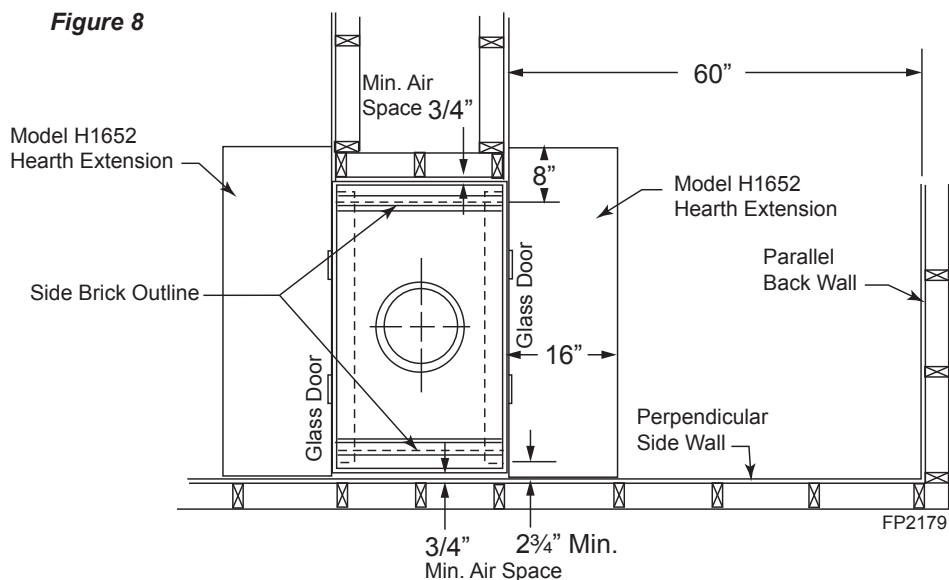


Figure 9

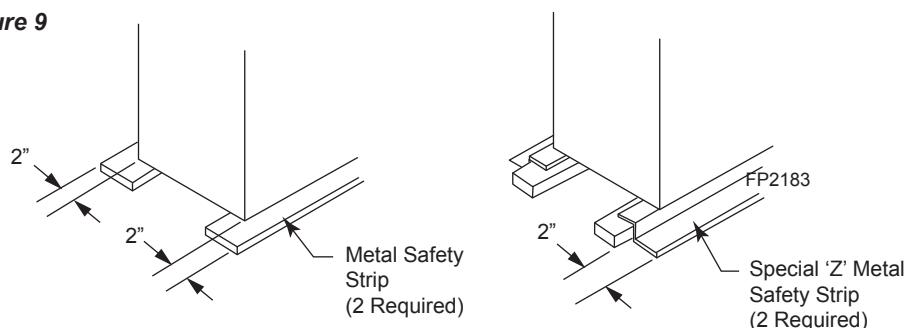
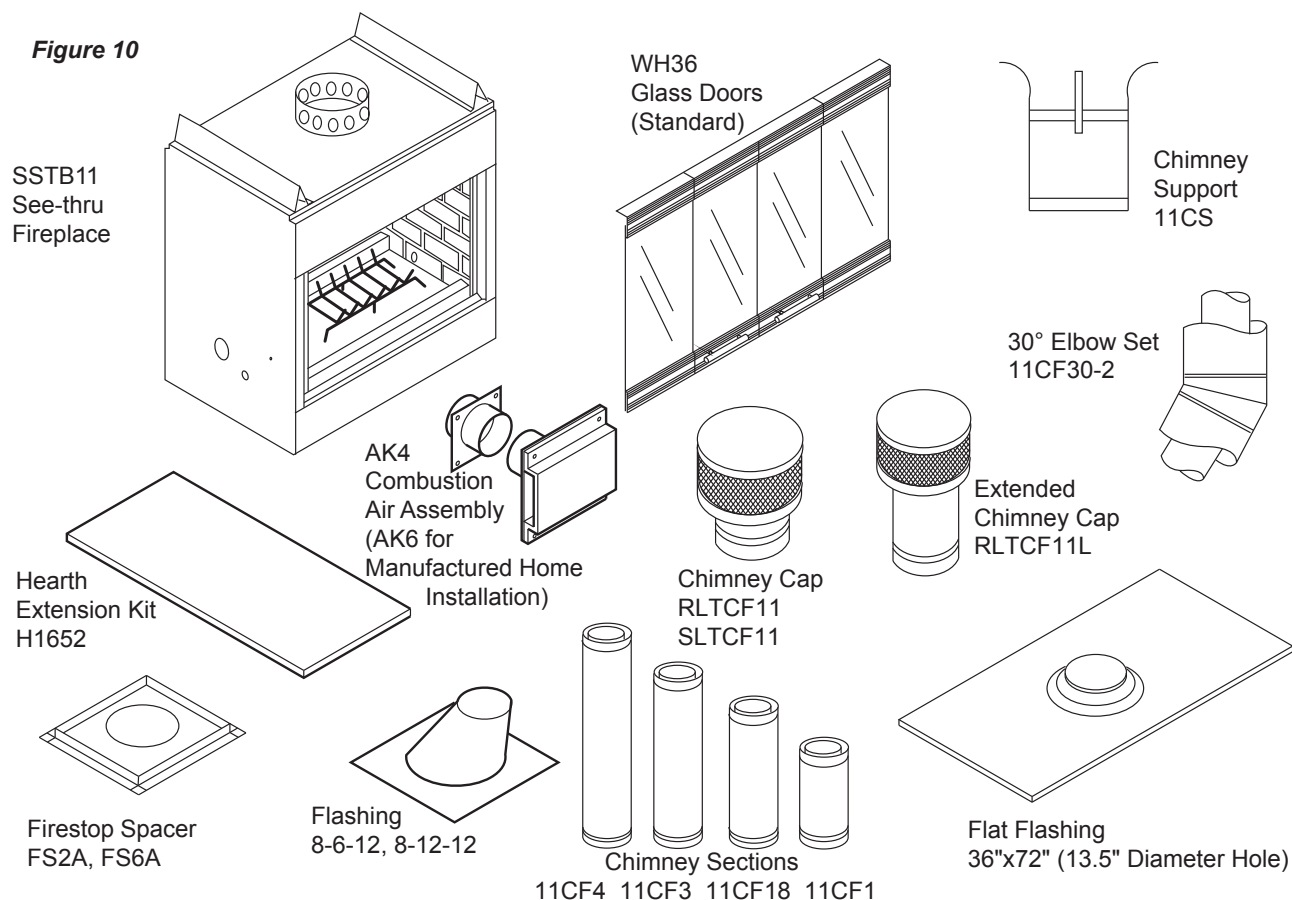


Figure 10



Model Number	Description
SSTB11	See-Thru fireplace with standard glass doors and wire mesh firescreens, heavy duty firegrate, and self-sealing flue damper. Fireplace is provided with openings to accept outside combustion air kits and gas line access for optional listed decorative gas appliance.
11CF1	12" chimney section
11CF18	18" chimney section
11CF3	36" chimney section
11CF4	48" chimney section
11CF30-2	30° elbows (package contains two 11" diameter elbows) One pair is required for each offset.
11CS	Chimney support (required when chimney height exceeds 30 feet)
SLTCF11	Chimney cap for contemporary installations.
RLTCF11	Round chimney cap for contemporary installations.
RLTCF11L	Extended chimney cap for contemporary installations.
8-6-12	0-6/12 pitch flashing for contemporary installation.
8-12-12	6/12 to 12/12 pitch flashing for contemporary installation.
FS2A	Vertical Firestop spacer - One required at each ceiling or floor level.
FS6A	30° Firestop spacer - for 30° chimney incline through ceiling or floor.
FP-4-U	4" flexible combustion air duct-8-foot lengths.
FP-6-U	6" flexible combustion air duct 8 foot lengths. For manufactured home installation.
403	4-inch duct connector (for splicing FP-4 ducts). Includes two clamps.
AK4	4" outside combustion air assembly.
AK6	6" outside combustion air kit. Required on manufactured home installation.
ST44TK	Optional decorative brass finish surround. Frames fireplace opening to provide an economical installation with an expensive look.
H1652	Hearth extension-protects floor against sparks and radian heat (residential installation) 16" x 52"

Location Selection

Unpack and check the fireplace and chimney for damage. If any items have been damaged, report this to your dealer. Before beginning the installation, be sure you have the proper parts in sufficient quantity. Refer to replacement parts page for proper identification of parts. Do not substitute parts. Use only parts listed for use with the Model SSTB11 fireplace.

Fireplace Installation

1. Refer to Figure 1 for an example of a typical installation of the fireplace components.
2. Be sure the location of the fireplace will provide the required clearances indicated by *Figures 2, 3 & 5* and the minimum chimney air space clearance to combustibles of 2".
3. Set the fireplace in the desired location and be sure it is securely supported and leveled. Check the face of the fireplace with a carpenter's level and if it is not plumb; correct it by placing shims under the edges of the fireplace.
4. Block in the fireplace to prevent any shifting of the firebox. Secure the fireplace with nails or screws through the flanges located on each side of the fireplace. Do not enclose the fireplace until the combustion air duct and chimney pipes are installed.

NOTE: Some local codes may require electrically grounding the fireplace and chimney.

Chimney Installation

In order to assure safe and satisfactory performance of the fireplace, it is very important to properly install the chimney. This is an important part of the installation and the sections of this manual pertaining to chimney installation should be reviewed very thoroughly.

For your safety, some of the important things to remember in regard to chimneys are listed below:

1. Use only parts and accessories labeled for use with this fireplace.
2. Use only undamaged parts and accessories.
3. Enclose the chimney where it passes through the living spaces to prevent contact with and possible damage to the chimney.
4. Install firestop spacers at each ceiling level.
5. Install the proper chimney cap or chimney housing on the chimney to prevent the entry of rain and debris into the chimney and to assure the proper venting of smoke.
6. Do not use more than four (4) elbows in the chimney.

NOTE: To select the proper chimney height, refer to *Figure 1*. The flue outlet must be a minimum of 3' above the highest point where the chimney penetrates the roof and a minimum of 2' above all portions of the building within 10'. If the chimney is to include elbows to offset the chimney, refer to the Chimney Offset and Cap Installation section of this manual. There must be at least 2" air space between all sections of the chimney and combustible materials between floors.

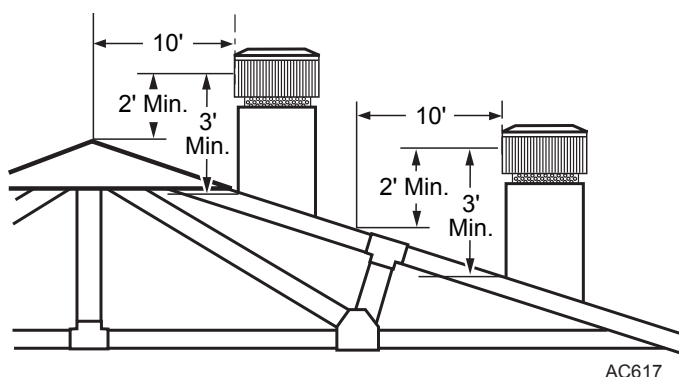


Figure 11

NOTE: Flue outlet should be 24" above all portions of the building within 10' as shown in the illustration. The chimney must not extend more than 90" above the roof without additional support.

CHIMNEY INSTALLATION

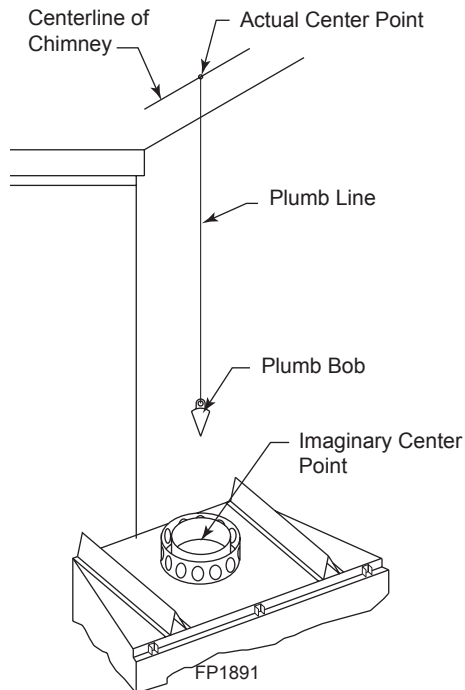
1. Lay out, cut and frame openings through all ceilings and the roof at the point where the chimney will pass through. Unless the chimney is to be offset, the point where the center line of the chimney will pass through the ceiling and roof can be determined with a plumb line as shown in *Figure 12*. The fireplace should be located in the planned installation position. After the center line is established and a nail is driven to mark the point, the opening can be cut if you are satisfied with the chimney location relative to ceiling and roof joists and/or any other obstructions. The roof opening center line should be marked by driving a nail through the roof from underneath that will penetrate the roof and can be located from the rooftop. If the chimney is to penetrate a pitched roof, the hole in the roof must be rectangular instead of square and should be sized according to Table 1.

Table 1

CHIMNEY HOLE SIZE

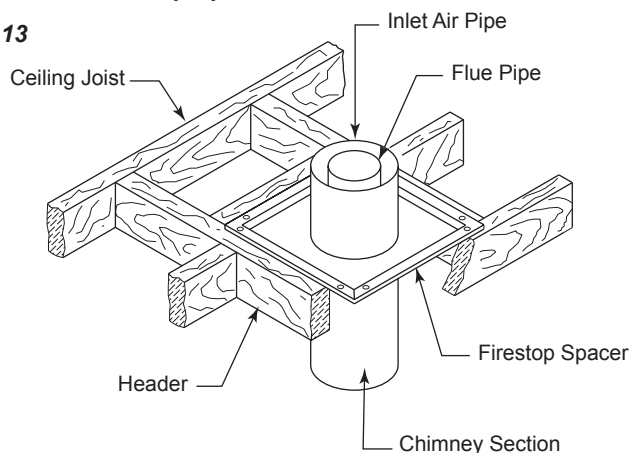
Size of Chimney	Angle of Chimney at Ceiling	
	Vertical	30°
11" CF 2-Wall	FS2A 17½" x 17½" (445 x 445 mm)	FS6A 17⅞" x 29⅝" (454 x 753 mm)

Figure 12

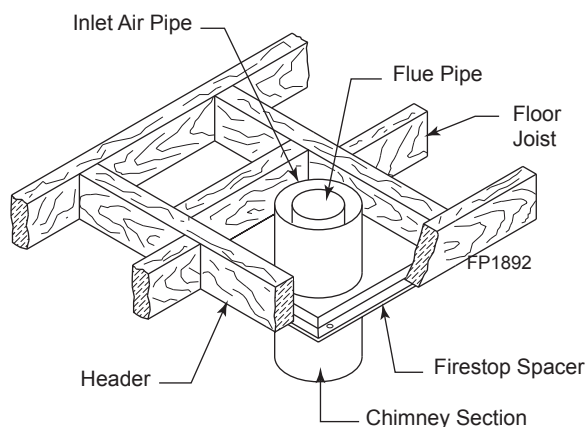


Firestop Spacer Installation at Attic Level

Figure 13



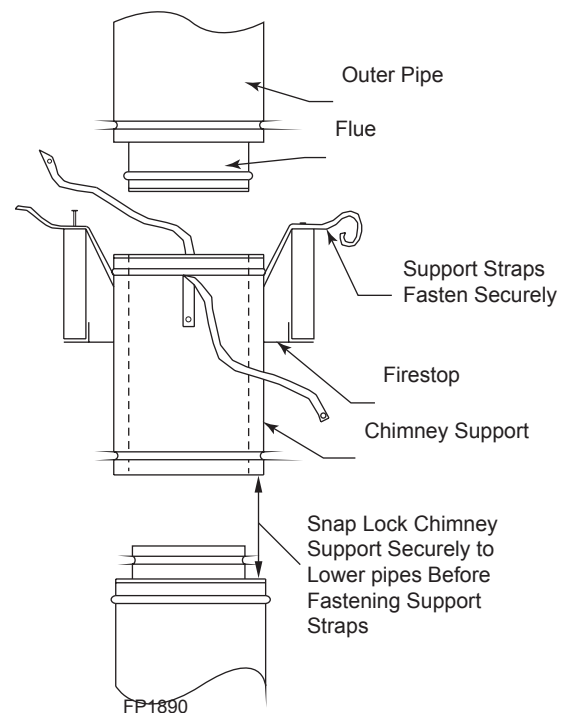
Firestop Spacer Installation at Floor Levels



2. Install the firestop spacer as required from beneath the ceiling unless the space above is attic space. In an attic, the firestop spacer should be installed at the floor level of the attic. You must have joists or headers on all four sides of the spacer and use a minimum of four 8-penny nails to secure the spacer.
3. To install the chimney sections, insert the male end of the flue, the smallest diameter pipe, into the flue outlet of the fireplace and press down until the snap locks engage. Continue the process, adding the chimney sections on top of each other until the chimney is at least six inches above the roof opening on all sides. As the chimney sections are installed, check each joint to make sure it is properly locked to the previous section. If additional strength of the outer pipe joints is desired, you may use two or three sheet metal screws placed through the area where the outer pipes overlap one another. To install these screws, drill a 1/8-inch diameter hole through the chimney sections, taking care not to penetrate the inner flue pipe. **WARNING:** Be very careful when drilling the holes into the outer pipe. The drill must not penetrate the inner stainless steel pipe.

NOTE: If you intend to have a total fireplace installation of more than 30 feet you must use chimney support model 11CS at or below 30 feet to support the weight of additional chimney pipe.

Figure 14



To install the chimney support, place the crimped end of the flue and outlet air duct portions into the last section of chimney pipe. Push down until the outside or inlet air duct of the chimney support overlaps and snap locks the chimney support into the chimney section.

Nail the support straps tightly to a building frame member or ceiling joist as shown by *Figure 14*. You must use at least two 8-penny nails per strap.

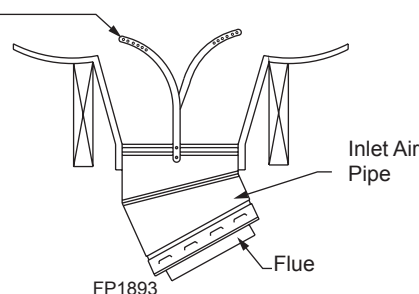
Elbow Installation

The following are important points that should be observed when installing elbows on the fireplace:

1. The support straps of all elbows not installed directly on top of the fireplace should be nailed securely to the surrounding structure. This allows the support strap to carry the weight of the chimney above the elbow and prevents this weight from breaking the elbow or chimney sections apart.
2. Elbows should not be used in any combination that inclines the chimney more than 30 degrees from vertical.
3. The limitations on the quantity of elbows per chimney are as follows: If the total height of the fireplace and chimney is—13' or more — two (2) elbows may be used in the chimney. 21' or more — four (4) elbows may be used in the chimney.
4. The inclined portions of chimneys that pass through living spaces likely to be used for storage should be enclosed to avoid contact with and possible damage to the chimney. The minimum air space of 2" between the chimney and enclosing materials must be maintained.
5. The length of the inclined portion of chimney between elbows must not exceed 6' when unsupported or 20' if the chimney is supported at 6' intervals with support such as metal support straps.
6. When enclosing the elbows and inclined portions of the chimney, enclosing materials must be installed vertically to maintain the required 2" minimum air space clearance to the chimney at the extremities of the offset. It is recommended that enclosing material not follow the inclined portions of the chimney.

Figure 15

All four (4) support straps must be nailed on to framing member around the elbow with a minimum of two (2) 8-Penny nails per strap



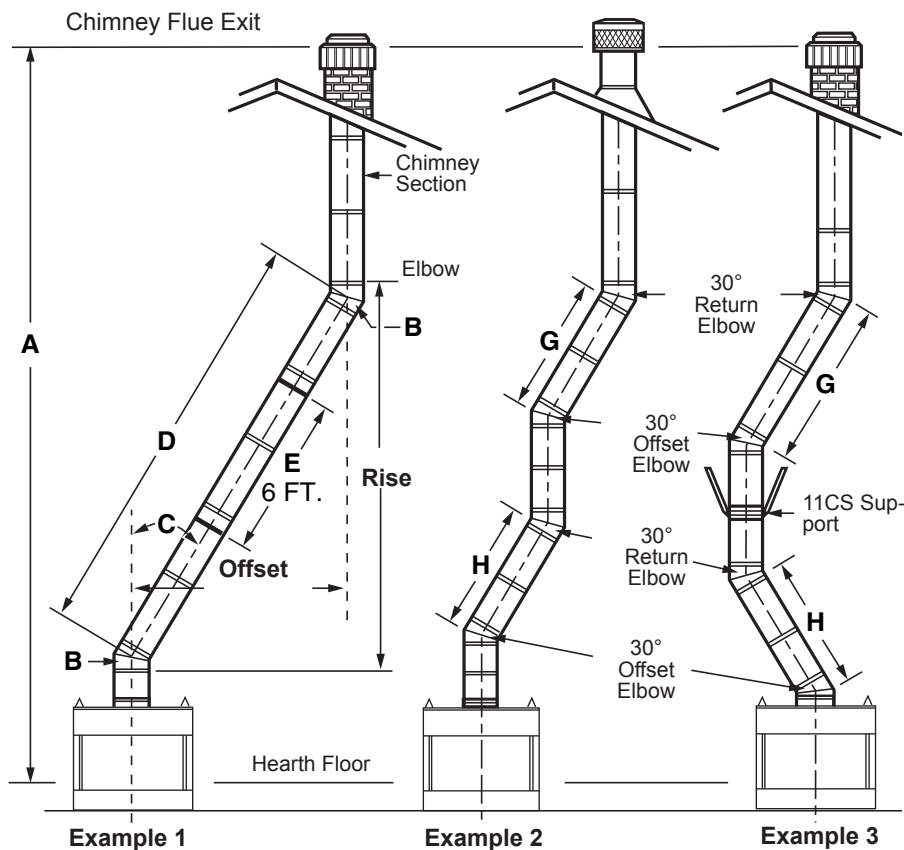
Offset Installation Sequence

1. Determine the location and amount of offset required, then select the combinations of chimney sections and elbows required from the offset chart. *Refer to Page 15.*
2. Install the first elbow by placing the extended flue into the mating part of the fireplace or chimney section. Push down until the outside or inlet air duct of the elbow overlaps and the snaps lock the elbow into the fireplace or chimney section.
3. Nail the support straps to the framing member with a minimum of two 8-penny nails per strap.
4. Install the sections of pipe between elbows until the proper number of chimney sections have been installed.
5. Install the second elbow to return the run of the chimney to vertical.
6. Nail the support straps of the second elbow to a building frame member.
7. Continue installing the vertical portion of the chimney.

NOTE: If the inclined portion of the chimney passes through a floor or ceiling, a firestop spacer should be installed to provide the firestop and support required. Be sure proper spacing is maintained between the chimney and combustibles.

NOTE: Although both halves of the elbow set may have tie straps, only the top half must be secured. The bottom elbow half is not required to be secured for added stabilization of pipe.

Chimney Requirements - Offset Installations



Notes: G + H cannot exceed 20 feet.
 *11CF Chimney airspace clearance = 2" minimum.

Illustration Key

The following safety rules apply to offset installations (letters correspond with illustration above):

A. Height of the chimney is measured from the hearth to the chimney exit.

	SSTB11
Max.:	86'0"
Min.:	
0 Elbows	18'0"
2 Elbows*	24'0"
4 Elbows*	30'0"

B. Do not use more than 4 elbows per chimney.

Attach the straps of the return (top) elbow to a structural framing member.

The offset (first) elbow of any pair does not have straps.

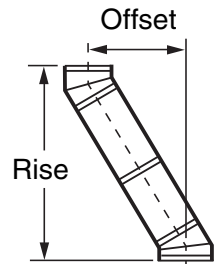
C. The chimney cannot be more than 30° from the vertical plane in any installation.

D. The maximum length of the angled run of the **total** chimney system is 20 feet. (G plus H cannot exceed 20 feet.)

E. A chimney support (Model 11CS) is required every 6 feet of angled run of chimney. Chimney supports are required for every 30 feet and 60 feet chimney height above the hearth.

Determine the offset distance of your chimney arrangement from the centerline of the fireplace to the centerline of the chimney where it is to pass through the first ceiling.

NOTE: This offset distance may not be your full offset distance. See Examples 2 and 3.



FP282

30° Elbow Offsets

1'	1½'	3'	4'	Chimney Support	Offset	Rise
0	0	0	0	0	3"	11"
1	0	0	0	0	8¼"	20"
0	1	0	0	0	11¼"	25¼"
2	0	0	0	0	13½"	29¼"
1	1	0	0	0	16½"	34¼"
0	0	1	0	0	20¼"	40¾"
2	1	0	0	0	21¾"	43½"
0	0	0	1	0	26¼"	51¼"
0	1	1	0	0	28½"	55¼"
1	0	0	1	0	31½"	60¼"
0	1	0	1	0	34½"	65½"
0	0	2	0	0	37½"	70¾"
1	1	0	1	1	41½"	77¾"
0	0	1	1	1	45"	83¾"
0	1	2	0	1	47¼"	87½"
0	0	0	2	1	51"	94"
0	1	1	1	1	53¼"	98"
0	0	3	0	1	56¼"	103¼"
0	1	0	2	1	59¼"	108½"
0	0	2	1	1	62¼"	113½"
0	1	3	0	1	64½"	117½"
0	0	1	2	1	68¼"	124"
0	1	2	1	1	70½"	128"
0	0	0	3	1	74¼"	134½"
0	1	1	2	2	78"	140¾"
0	0	3	1	2	81"	146"
0	1	0	3	2	84"	151¼"
0	0	2	2	2	87"	156½"
0	1	3	1	2	89¼"	160¼"
0	0	1	3	2	93"	166¾"
0	1	2	2	2	95¼"	170¾"
0	0	0	4	2	99¼"	177¾"
0	1	1	3	2	101¼"	181¾"
0	0	3	2	2	104¼"	186¼"
0	1	0	4	2	107¼"	191½"
0	0	2	3	2	110¼"	196¾"
0	1	3	2	3	114"	203¼"
0	0	1	4	3	117¾"	209¾"
0	1	2	3	3	120"	213½"
0	0	0	5	3	123¾"	220"

Figure 16

Figure 17

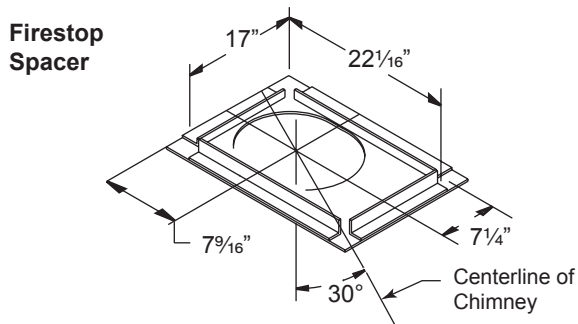


Figure 18

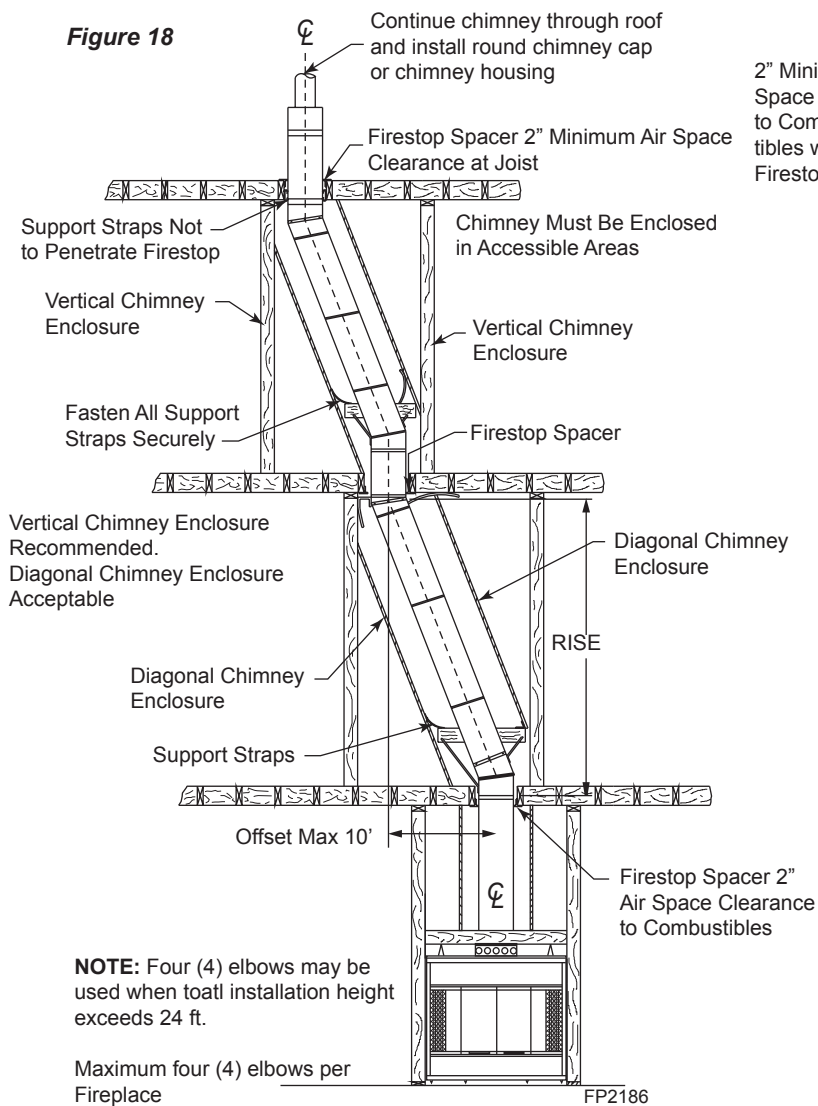
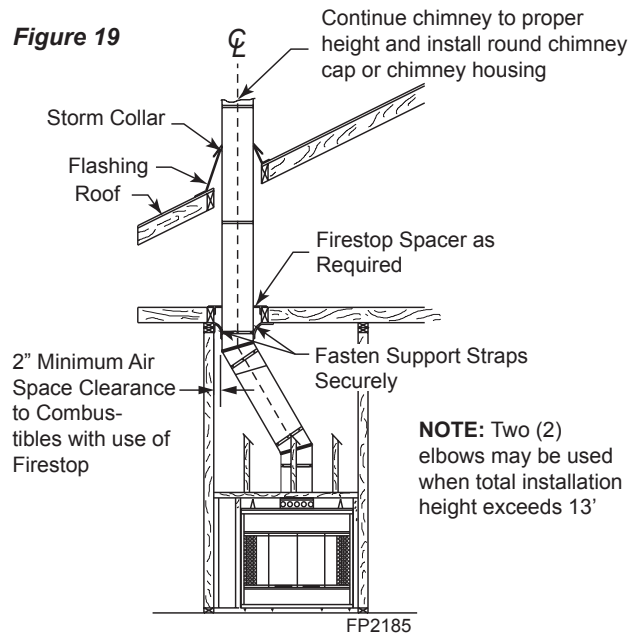
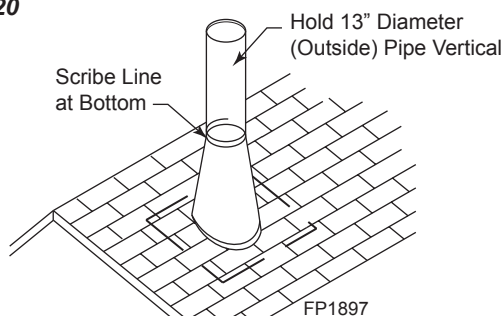


Figure 19



1. Extend the regular chimney sections until the top of the chimney is 4" below the total flue height desired. Do not snap the last section of inlet air duct or largest diameter pipe in place until Step 3 is completed.
2. Remove the shingles from around the chimney so that the flashing may be installed, with the upper part of the flashing under the shingles.
3. Set the flashing on the roof. Hold a section of the outside pipe (13" diameter) on the flashing and scribe a line around the flashing, then cut the top off the flashing by cutting 1/4 inch below the scribed line. This should increase the diameter of the flashing outlet sufficiently to allow the flashing to be placed over the chimney. *Figure 20*

Figure 20



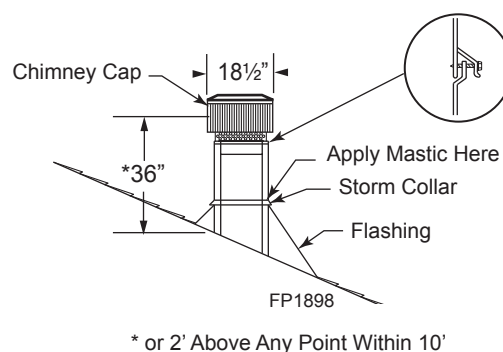
NOTE: RLTCF11L chimney cap is same as RLTCF11 with the exception of a longer telescoping pipe which may be needed for special installations such as chase installations.

4. Snap the last section of inlet air duct in place and slide the flashing over the chimney. Adjust the chimney to assure that the proper minimum clearances are maintained.
5. Nail the flashing securely in place with eight nails.
6. Seal the crack between the top of the flashing and the chimney with mastic. Leave some excess mastic at this area to be used in step eight. **NOTE:** Use pliers and wear gloves when performing step seven to minimize the danger of cutting your hands on the edge of the storm collar.
7. Place the storm collar around the chimney and put the collar together like a belt in belt loops. Slide the end of collar under the two loops on the other end with the loops facing up. Overlap the ends of the collar until it is tight against the chimney. Bend the free end of the collar back over the loops to hold the storm collar securely together. The excess end of the storm collar may be trimmed off.
8. Slide the storm collar down snugly against the flashing until the excess mastic left in step six is forced up into the crack between the storm collar and the chimney. This should make the joint between the flashing and the chimney watertight.

9. Install the chimney cap by placing the cap into matching parts of the last chimney section. Then punch or drill 1/8 inch diameter holes in the inlet air duct (chimney pipe) where specified on the brackets and fasten it down with the No. 8 screws provided. Do not penetrate the inner stainless steel pipe while installing the screws.
10. Check all the parts of the fireplace, chimney and chimney termination cap to assure that no parts have been damaged or bent during installation and that all parts have been installed properly.

NOTE: The metal used for the chimney cap has a rust protective coating but the cut edges of the parts are not protected. To prevent rusting and rust staining of nearby structures, exposed parts of the chimney and chimney cap should be detergent washed and painted with a galvanized primer paint.

Figure 21



The preinstalled chimney sections should be no more than 13" below the top of the chase. The installation should be planned so that either a two-foot or three-foot chimney section will be used for the top section. This is necessary to ensure complete engagement of the inlet air telescope and chimney cap into the top section.

1. Extend the chimney sections until the top of the chimney is not more than 13" below the top of the chase.
2. Center the hole in the chase cover over the chimney. The chase cover overhang should be lanced, formed over the chase and secured with nails. This prevents water from seeping under the chase cover. If two or more chase covers are to be used on the same chase, they should be soldered together to form two watertight seams.
3. Place the outer telescope inside the hole in the chase cover and lower it down into the mating pipe of the chimney until the support brackets on the telescope section rest on the flange of the chase cover.
4. Bend the tab with a hole on each bracket outward and secure cap to flashing, using the tabs provided.
5. Once the telescope is secured, place the rain shield over the top of the telescope pipe assembly. The rain shield will be supported by the telescope brackets.

CAUTION: Be careful around electrical wires to avoid the electrical shock hazard of contacting the wires with the metal chimney components.

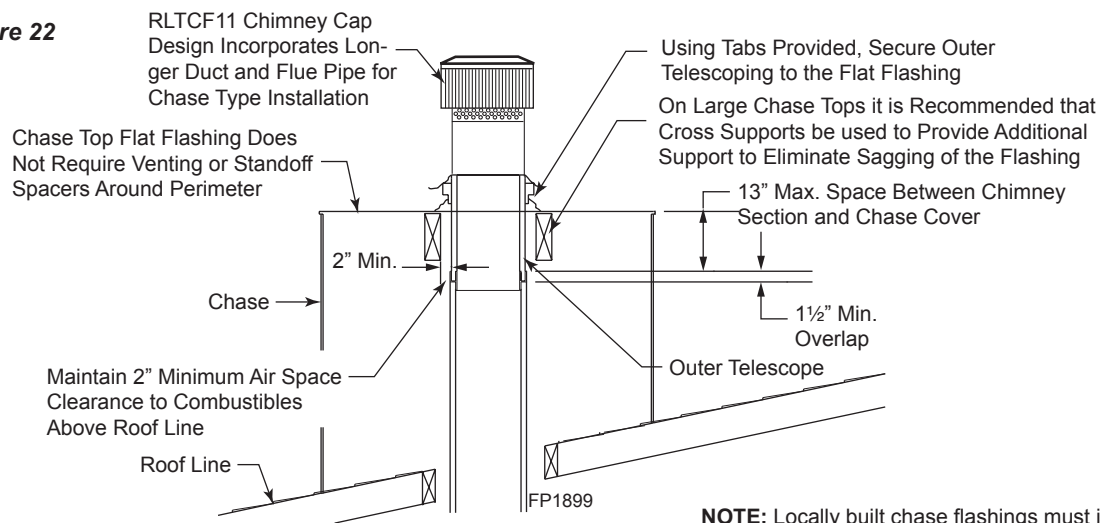
NOTE: When two fireplace chimneys are terminated above the same chase, the centers of the chimney caps should be at least 24" apart to help prevent smoke from a fireplace in use from being drawn down the chimney of a fireplace that is not in use. Additional spacing between caps or staggering the height of the caps will further lessen the likelihood of this occurring.

6. Place cap assembly into position by aligning the flue telescope into the last section of flue pipe and lower it down until the 3 cap legs rest on the top edge of the outer telescope pipe. Secure legs of cap to the telescope with screws provided.

7. Check all parts of the chimney and chimney cap to assure that no parts have been damaged or bent during installation and that all parts have been installed properly.

NOTE: The metal used for the chimney and chimney cap has a rust-protective coating but the cut edges of the parts are not protected. To prevent rusting and rust staining of nearby structures, exposed parts of the chimney and chimney cap should be detergent-washed and painted with galvanized primer paint.

Figure 22



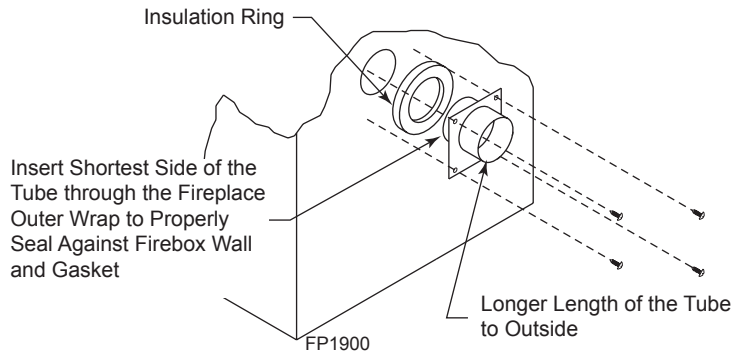
NOTE: Locally built chase flashings must incorporate a 13 1/4 min. to 13 3/4 max. x 2" high min. flanged hole for proper installation of the RLTCF11 chimney cap.

OUTSIDE COMBUSTION AIR PRECAUTIONS & RECOMMENDATIONS

NOTE: The use of outside air for combustion is optional unless required by building codes. It is only necessary to supply outside combustion air to one side of the fireplace. Use the Model AK4 combustion air kit.

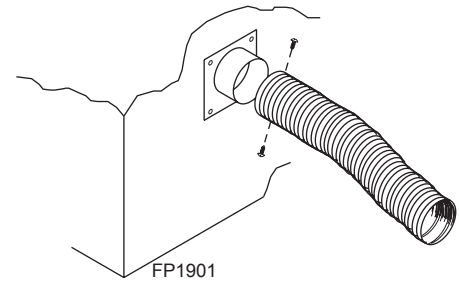
Figure 23

Secure Outside Air Starting Collar to Fireplace



Step 1: Secure outside air starting collar to left side of fireplace with four (4) sheet metal screws provided.

NOTE: The starting collar extends through the outer fireplace jacket and will seal against the firebox wall when secured as indicated.



Step 2: Secure outside duct to starting collar with duct clamp or screws.

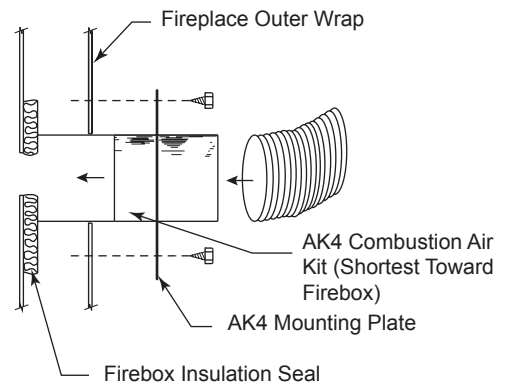


Figure 24

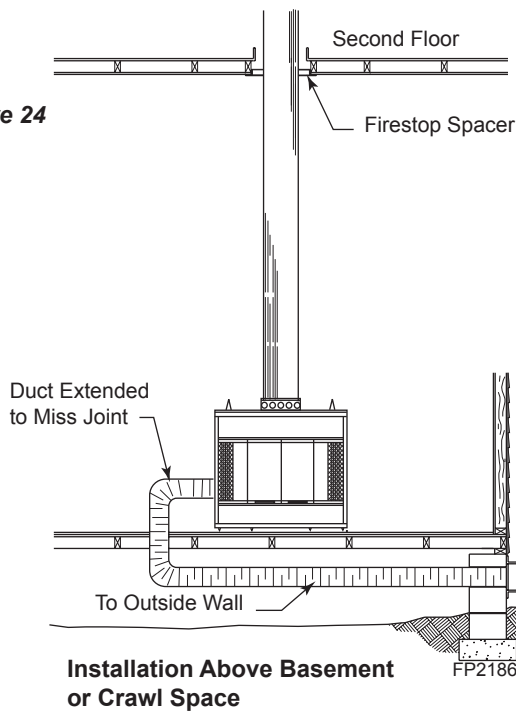
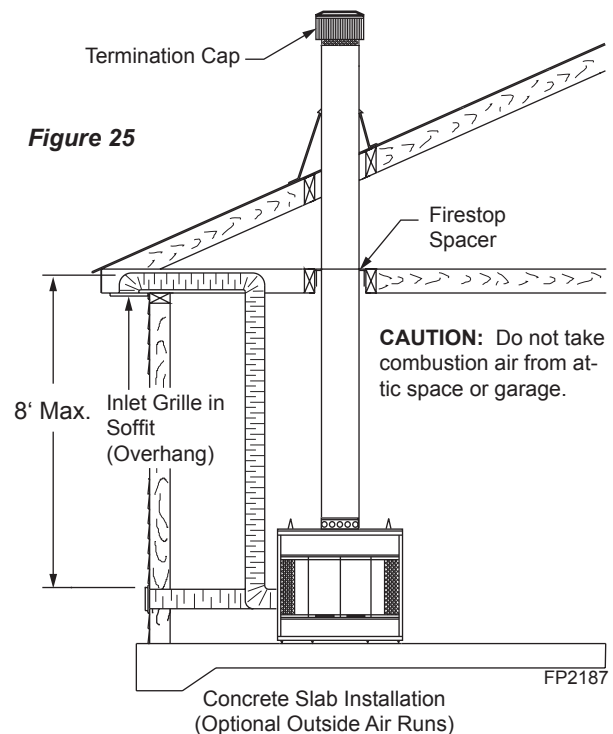
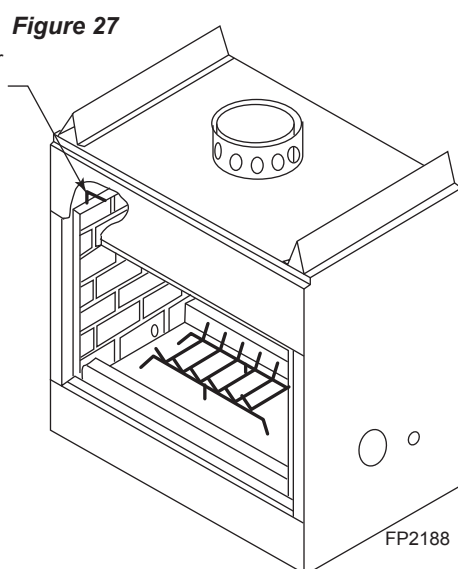
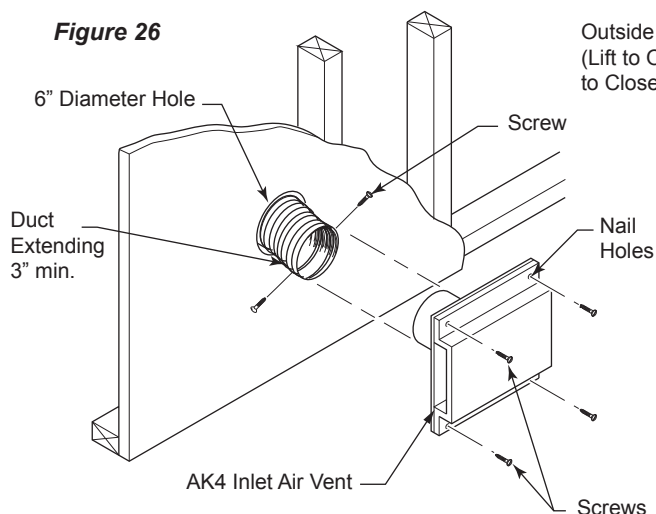


Figure 25



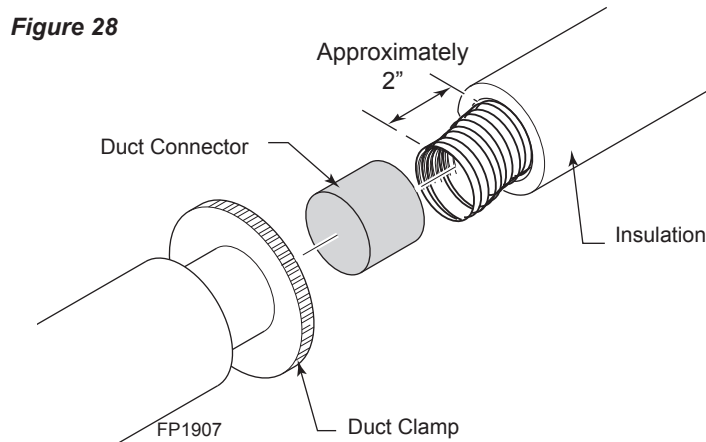
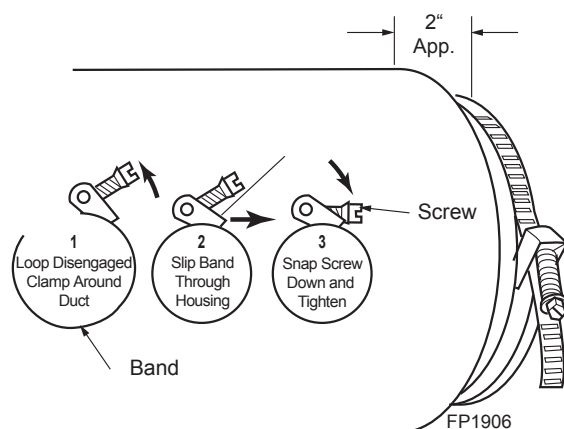
Outside Combustion Air Recommendations (continued)

1. Extremely long runs and numerous turns in the duct leading from the fireplace to the combustion air assembly should be avoided. These conditions will increase the resistance to the free flow of air through the duct. Refer to *Figures 1, 24, and 25* for methods of installing the outside air for combustion assemblies.
2. The combustion air assembly should be located at an exterior location, which is not likely to be accidentally blocked in any manner. The assembly should be located above the snow line to prevent blockage by snow accumulation.
3. The combustion air inlet assembly should never be mounted in a garage or storage area where combustible fumes such as gasoline might be drawn into the fireplace.
4. Combustion air can be drawn from the crawl space under a house when an adequate supply of air is provided by open ventilation.
5. Do not take combustion air from attic space or garage space.



Installing Model 403 Duct Connector

1. Push insulation back approximately 2" from the end of each duct.
2. Slip each duct over duct connector until an equal length of connector extends into each duct.
3. Place duct clamp over the end of each duct. Tighten duct clamp down snugly.
4. Push insulation back into place and over duct clamp.



Model AK-4 Combustion Air Assembly

1. Remove the cover plate from the 4-inch outlet opening location on the left outside of the fireplace. DO NOT remove the cover if the outside air will not be connected.
2. Place the insulation ring between the AK-4 starting collar and fireplace wall and place the starting collar (4 inch) into the hole on the left side of the fireplace. Fasten it in place with the four sheet metal screws provided.
3. Cut a 6-inch diameter opening for model AK-4 in the outside wall covering where the outside vent is to be located.
4. Select and cut a piece of duct sufficient length to attach to the fireplace and protrude at least three inches beyond the face of the wall to which the AK-4 inlet air vent will be attached. The duct may be cut with a standard pocket knife (use FP-4 U duct for maximum efficiency and safety). Do not use a combustible duct. Always use UL Listed Class 0 or 1 duct material.
5. If the duct is the insulated type, push the insulation back from one end of the duct approximately two inches.
6. Slip the exposed end of the duct over the starting collar on the fireplace.
7. Using the sheet metal screws provided, secure the duct end to the collar attached to the fireplace.
8. Nail or screw the combustion air assembly to the surface of the wall.

NOTE: If the wall covering is brick or stone, use appropriate masonry fasteners. Mount the combustion air assembly with "TOP" upward to prevent cold air from entering through the wall. If it is necessary to splice the duct, a model 403-duct connector should be used to splice duct sections.

WARNING: Improper installation or operation of a gas appliance in this fireplace can allow unburned gas to leak out which will cause a fire or explosion hazard, or the release of poisonous carbon monoxide into the dwelling which can cause serious injury or death to its inhabitants. To reduce these risks to a minimum, the following important notices and instructions should be read and followed carefully.

MHSC fireplaces are designed to accept a 1/2 inch gas line for installation of an approved gas appliance. (MHSC manufactures a wide variety of gas logs for use in MHSC fireplaces.)

Be sure to have the appliance installed in accordance with building codes.

IMPORTANT NOTICES:

Gas pipe installation is intended for connection to a decorative gas appliance only when (1.) incorporating an automatic shutoff device and (2.) complying with the Standard for Decorative Gas Appliances for Installation in Vented Fireplaces (ANSI Z21.60) **or** Gas-Fired Log Lighters for Woodburning Fireplaces.

1. The provision for a gas line is intended for connection to a decorative gas appliance which and complies with the Standard for Decorative Gas Appliances for Installation in Vented Fireplaces, ANSI Z21.60. If a decorative gas appliance is installed, it must be installed in accordance with the National Fuel Gas Code, ANSI Z223.1.

CAUTION: When a decorative gas appliance is installed, the fireplace damper must be fixed in a manner which will maintain the minimum permanent vent opening at all times.

The installation of an unvented gas appliance (blue flame) may be installed which incorporates an automatic shutoff device, and complies with the National Fuel Gas Code Z223.1, Latest Edition.

If an unvented gas appliance (blue flame) is installed it must incorporate an automatic shutoff device, and must be installed in accordance with the National Fuel Gas Code Z223.1, Latest edition.

BTU input of a gas appliance installed in fireplace should be rated less than 100,000 Btu/hr.

CAUTION: If an unvented gas appliance is installed in the fireplace, the gas appliance must only be operated with the fireplace glass door fully open (if included).

The installer of the fireplace and gas appliance must describe the operation of the fireplace and appliance to the people who will be operating them and leave all instruction manuals with the operator of the fireplace.

NOTE: When installing an ANSI Z21.11.2 ventless appliance, the finishing material used for the mantel must

be rated at 250°F or greater.

WARNING: Do not operate an unvented gas log set in this fireplace with the chimney removed.

2. An approved gas shut off valve must be located outside the fireplace in an area accessible to the users of the fireplace.
3. All gas piping and fitting must be either steel or malleable iron. Unions must be of the ground joint type.
4. Some code authorities prohibit or place restrictions on the use of gas appliances in fireplaces. Check with local code authorities before proceeding with the installation.
5. The gas appliance and all connecting gas piping should only be installed by a licensed gas appliance installer.
6. The installer should advise the persons who will use the fireplace to set the fireplace damper in full open position when the appliance is in use.

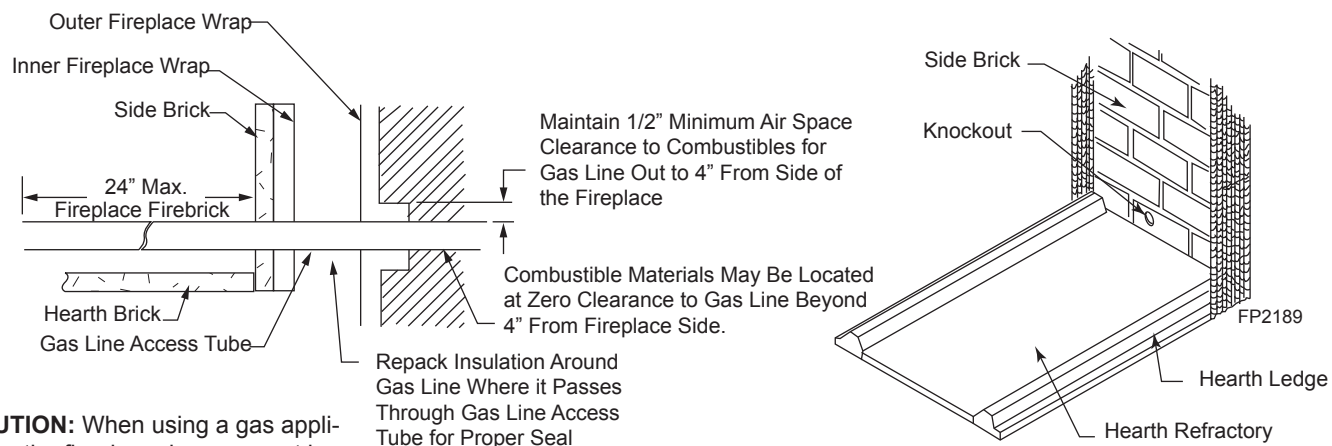
The following instructions only apply to passing the gas line through the fireplace wall. Follow the instructions provided by the appliance for the gas line, testing and adjusting it.

1. Locate the recessed area in the side refractory panel as shown by *Figure 29*.
2. Tap out a round hole in the brick liner with a hammer by tapping lightly on the recessed area.
3. Remove the two screws that hold the cover plates on the jacket wrap and discard the cover plate.
4. Use a screwdriver or similar tool to push the loose insulation out of the tube between the firebox and the outer jacket of the fireplace.
5. Install the 1/2" gas pipe through the tube between the firebox and jacket.

NOTE: Gas pipe should not come in contact with any wood structures until it has reached a point at least one (1) inch away from fireplace side.

6. Attach the gas appliance to the gas pipe according to the appliance makers instructions.
7. Pack the insulation removed in step 4 around the pipe to prevent air flowing through the tube either into or out of the firebox.
8. Be sure the gas is turned off at the appliance, then turn the gas on at the cut off valve and test the gas line connections for leaks with soapy water solution or a liquid leak detector. **DO NOT USE A MATCH OR OTHER FLAME SOURCE TO CHECK FOR GAS LEAKS.** If a gas leak is detected, turn the gas off immediately and fix the leak.
9. Proceed with testing the appliance for leaks and adjusting it as required by the manufacturer instructions.

Figure 29 Gas Line Plumbing Detail



Applying Decorative Trim To The Fireplace

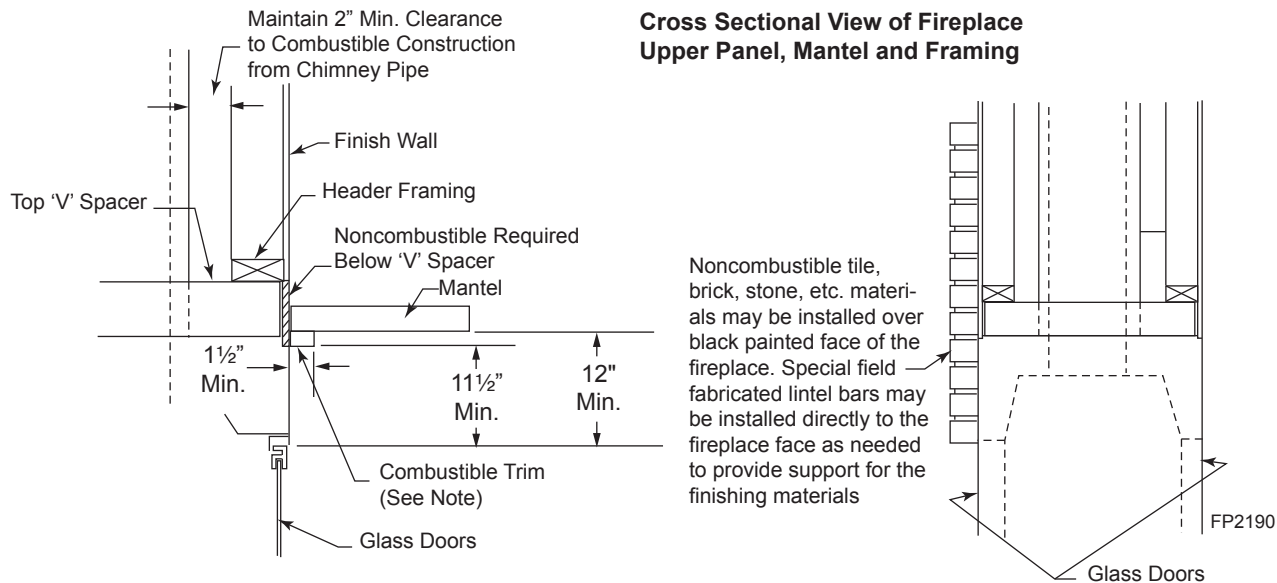
The face of your fireplace may be left exposed or trimmed with any noncombustible material such as brick, stone or marble. If a trim is installed, be sure it is fastened snugly to the face of the fireplace. A crack between the material and the face of the fireplace could pose a fire hazard and impair the proper operation of the fireplace. Blocking the fireplace with framing and attaching the base to the supporting floor will further reduce the possibility of such a crack developing.

Wall ties should be fastened to the face of the fireplace with sheet metal screws and placed in the mortar joints of masonry trim.

Combustible material must not be installed below the top spacers of the fireplace or overlap the sides of the fireplace face. Seal the face of the fireplace to the surrounding wall with non-combustible caulk or trim materials to prevent cold air leakage around the fireplace.

Figure 30

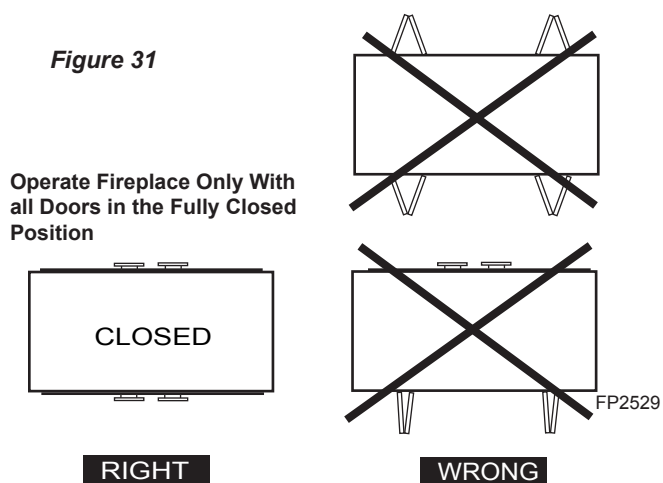
Cross Sectional View of Fireplace Upper Panel, Mantel and Framing



NOTE: Combustible trim must not overlap the black painted face of the fireplace by more than 1/8"

WARNING: If a decorative gas appliance is used in the fireplace the fireplace damper must be fixed in an open position. (See additional operation information in section titled "Operation Guidelines".)

WARNING: Fireplaces equipped with doors should be operated only with the doors fully open or doors fully closed. If doors are left partly open, gas and flame may be drawn out of the fireplace opening, creating risks of both fire and smoke. *Figure 31*



Advantages of a Wood Burning Fireplace

These are the practical, ecological advantages of wood as a fuel. Also to be considered is the aesthetic appeal. Most of us consider a wood fire with nostalgia. We enjoy the aroma, and find the flickering light of a cozy hearth conducive to a happy remembrance of things past. Wood has a low ash content. And the little ash that remains after burning is useful in home gardening as a fertilizer and soil conditioner. **WARNING:** This appliance is not for use as cooking equipment.

Which Woods Are Best?

Each wood species offers something different in aroma or heat value, and you should consider your needs and desires before building your fire. Softwoods, like pine, spruce, and fir are easy to ignite because they are resinous. However, a fire built entirely of softwoods burns out quickly and requires frequent replenishment. While a softwood fire is not too desirable for a long evening, it's fine in the morning when you want quick warmth, or late in the evening when you want a fire that will burn out before you go to bed.

On occasion when a longer fire is desired, it's best to combine softwoods with the heavier hardwoods such as ash, beech, birch, maple, oak and hickory. These hardwood species burn less rapidly, with shorter flames, and produce steady, glowing coals.

For the most pleasing aroma, burn the wood of fruit trees such as apple and cherry, or nut trees such as beech, hickory and pecan. Such wood is generally more expensive, but a little combined with other wood, goes a long way. Start your fire with a mixture of softwood and hardwood, then add some fruit or nut wood for nostalgic aroma. Since most woods will not burn well when freshly cut, the wood you purchase should be reasonably dry. The sizes you buy are dictated by the size of your fireplace. Purchase logs that will fit when laid across your grate, and ask that the larger, heavier logs be split. Kindling should be short, easily split lengths of softwood, lumber yard or mill scraps, or twigs and branches gathered from your yard.

How To Build A Better Fire

The first three fires should be of moderate size to allow the fireplace to adjust and the bricks to cure before being subjected to larger fires. First, make sure your room is well ventilated, your damper open and the flue is unobstructed. Then make sure your wood is dry and seasoned. Unseasoned wood burns poorly and coupled with poor ventilation or an obstructed chimney, leads to smoking problems. If your fireplace is equipped with an outside combustion air assembly, open the combustion air inlet by pushing upward on the lever located above the firebrick on the left side of the firebox.

NEVER USE GASOLINE, GASOLINE-TYPE LANTERN FUEL, KEROSENE, CHARCOAL LIGHTER FLUID, OR SIMILAR LIQUIDS TO START OR "FRESHEN UP" A FIRE IN THIS FIREPLACE. KEEP ALL SUCH LIQUIDS WELL AWAY FROM THE FIREPLACE WHILE IT IS IN USE. USE OF THIS FUEL CAN CAUSE A SERIOUS EXPLOSION.

Prepare your fire by placing two logs on the iron grate or fire basket, and laying the tinder between them. Tinder may be dry scrap paper, twigs, or bark. On top place a small handful of twigs or split softwood kindling. Place more dry logs over this base. Keep logs close together, as narrow air spaces between them promote better drafts, and heat reflected between adjacent surfaces aids in raising and maintaining combustion temperatures.

You'll need a minimum of three logs, preferably four, to make a good fire. Add kindling and new logs as needed to rekindle a dying fire. New logs should be added at the rear grate after raking the coals toward the front. **DO NOT OVERFIRE THE FIREPLACE.** Overfire conditions may be created by large amounts of kindling, building scraps, or other improper fuels.

Ashes, important because they form a bed of glowing coals, should only be left to accumulate within an inch or two of the bottom of the grate. Excess ashes can be used to check a flaming fire; or to "bank" your fire, cover the

logs with ashes. A “banked” fire will hold glowing coals for 8-10 hours, thereby saving a fire for later use.

Wood vs. Fossil Fuels

Compared to fossil fuels, a full cord of dry hickory weighs about two tons and is approximately equal in heating value to a ton of hard coal. On a pound basis, heavy hardwoods have about half the heating value of coal. The tabulation shows the relative densities and heat values of a variety of dry woods. Varieties at the top of the list (Dogwood) burn longer and those near the bottom (White Pine) ignite and burn quicker. A combination of both light and heavy wood is desired.

Species	Density	Heat Value
Dogwood	.70-.79	100-107
Hickory	.70-.74	100
Oak	.60-.73	86-99
Black Locust	.69-.70	95-98
Beech	.64-.66	89-91
Hard Maple	.58-.65	83-88
Birch	.55-.64	79-86
Apple	.58-.62	83-84
Ash	.57-.61	73-81
Southern Pine	.51-.60	73-81
Elm	.50-.59	71-80
Cherry	.50-.52	70
Douglas Fir	.45-.51	64-69
Spruce	.41-.44	59
Redwood	.33-.40	47-54
White Pine	.35-.37	50

A Few Words of Caution

Beware of burning certain material in your fireplace. Among these are plastics, poison ivy twigs and stems, and chemically treated woods such as discarded poles and railroad ties. These not only create air pollution, but can induce extreme irritation for some individuals.

Use hemlock, spruce, juniper and other resinous woods with caution. They contain moisture pockets which, upon heating, “pop” with considerable vigor.

Always use a fire screen. And always “bank” a fire, or at least push all unburned fuel to the rear of the grate before leaving a fire unattended. Do not use this fireplace as an incinerator.

Because the termination of the chimney above the roof is exposed to wind and cold and the pressure changes these and other environmental conditions may cause, a sufficient chimney draft may be hard to establish at times. At other times the draft may be sufficiently disrupted to cause smoke to spill from the fireplace opening. If problems with chimney draft occur, help start chimney draft before you build a fire by holding a piece of burning paper near the flue opening at the top of the firebox to preheat the chimney. If smoke spills from the fireplace opening after the fire is burning, open a window on the up wind side of the house that is far enough away from the fireplace that the wind will not blow across the fireplace opening, push the burning wood as near the back of the fireplace as possible, and if the fireplace is equipped with glass doors, close them.

DO NOT LEAVE CHILDREN OR PHYSICALLY OR MENTALLY HANDICAPPED, OR SENILE PERSONS ALONE WITH A BURNING FIREPLACE.

Fuel Storage

Wood can be dried sufficiently for burning within a few weeks if protected from rain in a low humidity area. It is far better to cut wood and allow it to dry for a year. In all cases, the wood should be stacked so that both ends of the sticks are exposed to the air and protected from rain. The drier the wood, the more usable heat produced by the fire and less likely rapid accumulation of soot and creosote within the chimney is to occur. See the section of this manual concerning chimney maintenance for information concerning the hazards of soot and creosote accumulation. Small quantities of wood required for fire tending must be kept at least 30 inches from the fireplace.

Disposal of Ashes

Ashes should be placed in a metal container with a tight fitting lid. The closed container of ashes should be placed on a noncombustible floor or on the ground well away from all combustible materials pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinder has thoroughly cooled. Ashes should never be placed in a container with combustible materials.

Chimney Maintenance

Creosote, Formation and Need for Removal: When wood is burned slowly, it produces tar and other organic vapors, which combine with expelled moisture to form creosote. The creosote vapors condense in the relatively cool chimney flue of a slow-burning fire. As a result, creosote residue accumulates on the flue lining. When ignited, this creosote makes an extremely hot fire.

The chimney should be inspected at least twice a year during the heating season to determine if a creosote buildup has occurred.

If creosote has accumulated it should be removed to reduce the risk of a chimney fire.

The chimney cap can be removed for inspection, maintenance and cleaning by removing three screws from the support legs and lifting upward.

When the fireplace is first in use, inspect the chimney frequently and clean the chimney any time an accumulation is observed on the flue walls. The frequency of these inspections can be increased or reduced appropriately after a pattern of accumulation has been established. Please note, however, that changes in the outside environmental conditions such as temperature and humidity or changes in the operation of the fireplace can lead to rapid buildup of soot and/or creosote.

To clean the chimney, obtain the services of a qualified and reputable chimney sweep, or remove the accumulation with brushes on wooden or fiberglass poles. Do not use metal pipes, chains, wires, etc., to clean the chimney

because such items can scratch the surface of the stainless steel flue which can shorten the life of the flue and provide a rough surface for soot particles to attach to.

Be sure to cover nearby furnishing and arrange some method of catching soot and creosote particles that may fall during the chimney cleaning process. If glass doors are installed on the fireplace, they should be closed. Extra caution must be used to avoid damage to the flue damper during the cleaning process.

In addition to checking and cleaning the chimney on a regular basis, be sure to inspect the chimney before starting a fire at the beginning of each heating season. Make sure the chimney is clear from any accumulation of soot, creosote or any other debris, and that all joints are intact.

MHSC does not recommend chemical cleaners because some may contain elements that corrode the metal parts of the chimney or fireplace.

Fireplace Maintenance

At the end of each heating season or when the fireplace will not be in use for an extended time, the ashes should be removed and the hearth area should be swept as clean as is practical. The slow absorption of moisture into the ashes over a long period of time could cause a condition which would be corrosive to the metal fireplace parts.

At the beginning of each heating season, always operate the flue damper and make sure it has not become stuck from soot, creosote, etc., during the period of inactivity.

Keep the lower and upper grille panels clean and free from dirt and lint accumulation at all times to get the maximum efficiency from your fireplace.

As you use the fireplace, expansion and contraction will cause minor cracking of the hearth, back, and side refractory materials. This is normal and unavoidable. If the cracks become large enough or parts dislodge and metal behind the refractory is exposed, the refractory panels should be replaced with new panels that can be obtained from your fireplace dealer.

Glass Door Maintenance

For glass door maintenance, see instructions provided with the glass doors.

Checklist of Do's and Don't's

DO'S

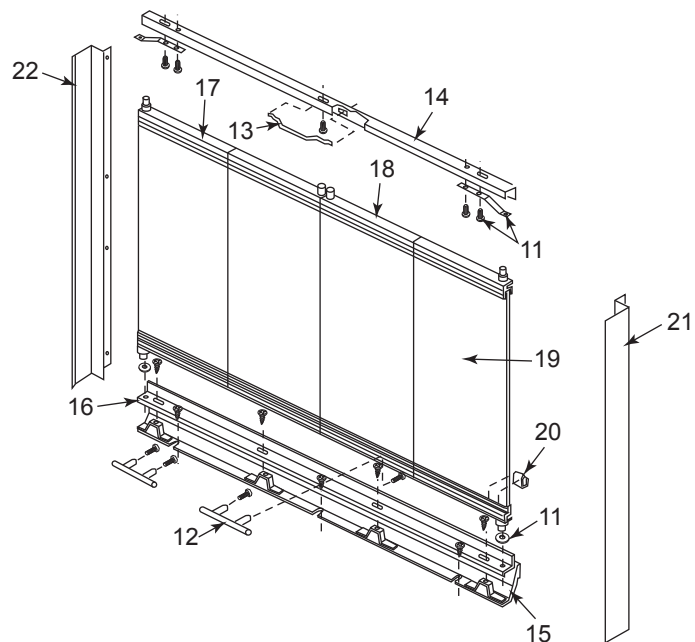
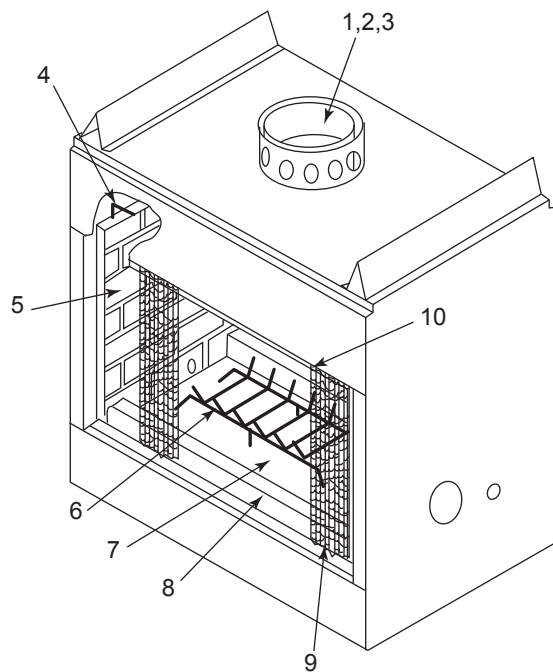
1. Do check with local building officials to be sure the installation of the fireplace complies with all building codes and requirements and obtain required building permits. Do plan your installation with safety as your primary consideration.
2. Do use only the prescribed material and parts for the installation of the fireplace.
3. Do insulate the exterior walls surrounding the fireplace to prevent excessive heat loss from the fireplace.

4. Do trim the face of the fireplace only with noncombustible materials.
5. Do attach the noncombustible face trim material firmly to the face of the fireplace.
6. Do block in or fasten the fireplace to prevent the possibility of the fireplace shifting out of position.
7. Do enclose the chimney where it passes through living spaces or spaces accessible for storage purposes to prevent contact with and possible damage to the chimney.
8. Do install firestop spacers at each ceiling level when the chimney is installed in a multistory building.
9. Do install the proper chimney cap or chimney housing on the chimney to prevent rain and debris from entering the chimney.
10. Do keep all flammable liquids, gases and pressurized containers away from the fireplace.
11. Do check the fireplace for proper adjustment and operation before leaving it unattended for long periods of time.
12. Do inspect and clean the fireplace chimney regularly.
13. Do keep the fire screens closed when the fireplace is left unattended to minimize the danger of sparks popping out of the fireplace.
14. Do use the grate furnished with and for this fireplace.
15. Do start a fire only with paper, kindling or solid composition fire starters specifically designed for starting a fire. The use of liquid fire starter can cause an explosion within the fireplace.
16. Do place all ashes in a metal container with a tight fitting lid and place them on a noncombustible surface well away from other combustible materials until they have completely cooled.
17. Do store your fuel supply at a distance equal to or greater than the spacing recommended for combustible materials from the fireplace.
18. Do build fires of moderate intensity in the fireplace for the first three fires to allow materials to adjust and cure before being subjected to the intense heat of a large fire.
6. Don't install the fireplace over carpeting.
7. Don't install the fireplace on a poorly constructed base or fail to fasten down or attach the fireplace to prevent it from shifting out of position.
8. Don't create or allow a crack to develop between the metal face of the fireplace and noncombustible trim.
9. Don't install the fireplace where flammable or explosive liquids or vapors are likely to be present.
10. Don't neglect all the considerations mentioned in this manual concerning clearances to combustibles, spacing from obstructions and proper chimney height when selecting the location and installing the chimney.
11. Don't allow insulating materials to contact the chimney.
12. Don't forget to support flat chase flashing to prevent water from puddling.
13. Don't neglect to apply caulking or mastic to the required joints of the flashing and between the flashing roof.
14. Don't dry clothing or other articles near the fireplace.
15. Don't store or place flammable liquids, gases or pressurized containers near the fireplace.
16. Don't neglect to instruct all responsible persons in the proper and safe operation of the fireplace.
17. Don't fail to instruct all persons, especially children and elderly persons, concerning the hazards of improper operation and unauthorized tampering with the fireplace.
18. Don't use this fireplace to burn paper, cardboard, or other debris.
19. Don't neglect to inspect and clean the chimney regularly.
20. Don't operate the fireplace with the glass fire screen doors partially open. The doors should always be fully open or fully closed.
21. Don't use gasoline, kerosene, engine oil, or charcoal lighter fluid.
22. Don't store fuel supply closer to the fireplace than the minimum spacing required for combustible materials.
23. Don't subject the fireplace to the intense heat of a large fire the first three times the fireplace is used, but build moderate fires to allow the materials to cure and adjust.
24. Don't clean the chimney with metallic devices or chemical cleaners.
25. Don't use the fireplace or chimney for venting wood or coal burning heaters or inserts unless approved in writing by MHSC.
26. Don't put combustibles within 28 inches of the fireplace opening.

DONT'S

1. Don't allow other installations or operation considerations to take priority over safety considerations.
2. Don't attempt to use the fireplace until the installation is complete.
3. Don't use unlisted parts and accessories with the fireplace except for special flashings that may be fabricated locally.
4. Don't use damaged parts or accessories with this fireplace.
5. Don't install the fireplace in an exposed or uninsulated area.

WARNING: IF NOT INSTALLED, OPERATED AND MAINTAINED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS, THIS PRODUCT COULD EXPOSE YOU TO SUBSTANCES IN FUEL OR FROM FUEL COMBUSTION WHICH CAN CAUSE DEATH OR SERIOUS ILLNESS AND WHICH ARE KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM. ALSO, OPERATION, INSTALLATION AND SERVICING OF THIS PRODUCT COULD EXPOSE YOU TO AIRBORNE PARTICLES OF GLASS WOOL FIBERS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER THROUGH INHALATION.



Ref.	Description	Qty.	Part No.
1.	Rod, Damper	1	047647
2.	Weldment Damper Weight	1	047649
3.	Handle Damper	1	037391
4.	Weldment, Air Door Rod	1	050340
5.	Side Brick Assy	2	050006
6.	Grate Ptd. Assy	1	050145
7.	Hearth Refractory	1	050299
8.	Hearth Ledge	2	050007
9.	Panel Firescreen w/Pull	4	026398
10.	Rod Curtain	4	034839
11.	Package Hardware	2	037032
12.	Handle Package Assy	2	037438
13.	Spring Door Closure	2	037416
14.	Track Top Ptd. Assy	2	036998
15.	Air Deflector Ptd. Assy	2	037005
16.	Track Bottom Ptd. Assy	2	036999
17.	Left Door Assy	2	038851
18.	Right Door Assy	2	038850
19.	Glass Panel	8	038847
20.	Retainer Glass Spring	32	038785
21.	Air Divider, Right	2	050156
22.	Air Divider, Left	2	050155

All repair part orders should be placed through your local dealer. To ensure prompt and accurate service, please provide the following information when placing a repair part order: Model number of your Appliance, Part Name, Part Number, and Quantity of parts needed.

Technical Service Department
MHSC
149 Cleveland Drive
Paris, KY 40361
www.mhsc.com

FACTORY-BUILT FIREPLACE AND COMPONENTS

(except blowers)

What is Covered and For How Long

- **Five-Year Coverage** - For five years from the date this fireplace and components are first purchased for use, MHSC will, at its option, repair or replace any defective part of this fireplace or components, or refund to you a sum not to exceed the factory retail price in effect at the time of purchase.
- **Ten-Year Coverage** - From the sixth through the tenth year following the date this fireplace or accessory is first purchased for use, MHSC will make available to you, at our factory, a free replacement for any defective part in this fireplace or accessory.
- **Twenty-Five-Year Availability of Replacement Parts** - From the eleventh through the twenty-fifth year following the date this fireplace or accessory is first purchased for use, MHSC will make available at our factory replacement parts for this fireplace or accessory, which you may purchase for the list price current at the time your purchase order is received.

What is Not Covered

This limited warranty does not cover:

- Transportation or shipping cost.
- The cost of a service call to diagnose trouble.
- Painted surfaces.
- Damage or defect caused by improper installation, accident, misuse, abuse or alteration.
- Poor ventilation of smoke or gases caused by air-conditioning and heating systems, exhaust fans or pressure differentials produced by wind.
- Broken glass components.
- Cracks in ceramic and castable parts that do not affect safe operation.
- We do not warrant this fireplace to be in compliance with your local building code. Building codes vary greatly throughout the country, and you should determine whether your local building code contains restrictions on the use of this fireplace before you purchase it.
- Blowers or fans, which are warranted separately.
- Heat loss due to the passage of heat or air through or around the fireplace.

Also, under our five year coverage, we do not pay the cost of removal and replacement of any portion of the structure in which the fireplace is situated, made necessary by the repair, removal or re-installation of the fireplace.

And under our twenty-five year warranty of availability of replacement parts, we only promise to maintain a supply of replacement parts at our factory for you to purchase.

Limitations and Exclusions

1. No one has authority to add to or vary this limited warranty, or to create for MHSC any other obligation of liability in connection with this fireplace and accessory.
2. MHSC shall not be liable for incidental, consequential, special or contingent damages you might suffer as a result of its breach of the written warranty or any implied warranty. Some states do not allow the exclusion of limitation of incidental or consequential damages, so the above limitations may not apply to you.
3. This warranty applies only to the original purchaser of the fireplace or to the original owner of the dwelling when the fireplace is installed in a new dwelling and may not be transferred.
4. This warranty applies only to a fireplace sold and used in the United States.

Your Duties

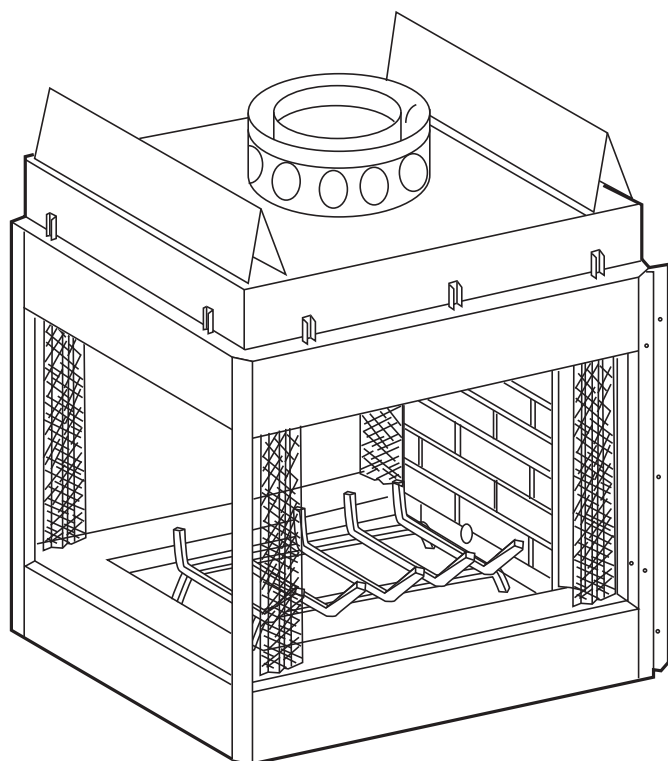
This fireplace must be installed by a qualified installer according to your local building codes and installation instructions and operated according to the owner's instructions. You must keep an invoice, canceled check or payment record to verify the purchase date of the fireplace.

If Warranty Service is Needed...

1. Contact your supplier. Make sure you have your warranty, your sales receipt and the model/serial number of your MHSC product.
2. DO NOT ATTEMPT TO DO ANY SERVICE WORK YOURSELF.

MHSC

149 Cleveland Drive • Paris, Kentucky 40361
www.mhsc.com



Woodburning Peninsula Fireplace Model: MPL11

Installation, Operation and
Maintenance Manual
for Residential Installation

SAFETY NOTICE: IF THIS APPLIANCE IS NOT PROPERLY INSTALLED, OPERATED AND MAINTAINED, A HOUSE FIRE MAY RESULT. TO REDUCE THE RISK OF FIRE, FOLLOW THE INSTALLATION INSTRUCTIONS. FAILURE TO FOLLOW INSTRUCTIONS MAY RESULT IN PROPERTY DAMAGE, BODILY INJURY OR EVEN DEATH. CONTACT LOCAL BUILDING OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION REQUIREMENTS IN YOUR AREA.

**NATIONAL
FIREPLACE
INSTITUTE**



CERTIFIED
www.nficertified.org

We recommend that our woodburning hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Woodburning Specialists or who are certified in Canada by Wood Energy Technical Training (WETT).



**Wood Energy
Technical Training**
www.wettinc.ca



This fireplace is listed by OMNI-Test Laboratories for use with "11CF" Series Chimney System Components.

Glass Doors are Required on This Model Fireplace

Congratulations!

You have chosen the finest wood burning fireplace available. Your fireplace has been designed for years of heating and viewing enjoyment. Please take time to read this entire manual before installing or operating your fireplace.

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Listing and Code Approvals

The instructions contained in this manual provide the information necessary to install this fireplace in accordance with Underwriter's Laboratories requirements and in compliance with the National Fire Protection Association Standard No. 211. Some codes may require the fireplace and chimney be electrically grounded. Before beginning the installation, you should check with local building officials to obtain required permits and assure compliance with local regulations and codes. If you encounter problems with code requirements, contact your dealer for assistance.

These Fireplace models are listed by OMNI-Test Laboratories, Inc. to U.L. 127-standard for factory-built fireplaces. The design of this fireplace and these instructions complied with applicable safety standard for a factory built fireplace in effect at the time the fireplace was

manufactured. You should be aware, however, that failure to install, operate, and maintain this or any other factory built fireplace properly can result in a house fire or other occurrences that could cause deaths, injuries, and property damages. It is very important that the persons installing and/or supervising the installation of this fireplace have appropriate skills in using the tools and techniques required; and reading and comprehension skills sufficient to read and follow these instructions. These instructions contain warnings, cautions, and notes to emphasize important safety information. To assure that safe and satisfactory service is received from this fireplace, please read the following special notices and all the contents of this manual.

MPL11
listed by OMNI-Test Laboratories to ANSI/UL 127 / ULC-S610 Standards for Factory-built Fireplaces

1. Read these instructions entirely before beginning any part of the installation. Save these instructions for any future repairs.
2. Use these instructions as a guide during the installation of the fireplace.
3. Be sure these instructions become the property of and are reviewed by all future users of this fireplace to encourage proper operation and maintenance.
4. All the parts used with this fireplace system must be installed in accordance with these installation instructions. Failure to do so may be hazardous and will void the warranty.
5. This fireplace and accessories should not be altered in any way that is not specifically recommended in this manual.
6. Refer to your local building code for local requirements pertaining to installation of factory-built fireplaces. These fireplaces are intended for installation and use according to standard NFPA NO.211 of the National Fire Protection Association.
7. This fireplace must not be installed with a masonry flue.
8. This fireplace and chimney should not be used for venting a wood or coal burning heater or fireplace insert.
WARNING: Do not install a separate solid fuel insert or gas fireplace insert into this fireplace and chimney system without written authorization.
9. **WARNING:** Do not pack required air spaces with combustible material or insulation not specifically recommended for use in such areas.

Intended Product Usage

The fireplace is designed to sit directly on a combustible floor. The fireplace must be installed with zero clearance to combustible building materials at the side and top spacers. Only parts manufactured by MHSC and labeled for use with the fireplace should be used in the installation of this fireplace except for special roof flashings that may be fabricated locally. The use of improper parts in the installation can be hazardous and voids the warranty offered by MHSC.

This fireplace is designed to burn wood. This fireplace is not designed to burn coal, unplumbed liquid fuels, unplumbed gaseous fuels or household refuse. Any attempt to burn these fuels in the fireplace can be hazardous.

WARNING: This fireplace and chimney must not be used for venting a solid fuel heater or fireplace insert unless written authorization is given by MHSC. Failure to heed this warning may cause a fire hazard and will void the warranty.

This fireplace is intended for supplemental heating only and is not intended for use as a primary heating system.

Use solid wood, plumbed propane (LP) or Natural Gas fuel only.

Do not use a fireplace insert or other product not specified for use with this fireplace.

Improper Installation

Improper installation or use of this fireplace will void the warranty and can cause:

1. Damage to the fireplace from overheating.
2. Hazardous temperatures to develop on combustible materials adjacent to the fireplace or chimney.
3. The emission of smoke, sparks or hazardous gases into the dwelling.
4. Leakage of rain water into the dwelling.

When an AK4 combustion air assembly and a combustion air duct are attached to the connecting point on the left or right side of the fireplace, combustion air may enter the firebox through a dampered opening behind the left or right side brick. This feature is designed for your benefit to reduce the room air used for combustion and to prevent excessive loss of heat from the room. When the fireplace is in use, this damper should be open. When the fireplace is not in use, the damper should be closed to prevent cold air from entering the firebox. The combustion air damper is open when the lever, located on the left and right side of the firebox near the top of the firebrick, is up and closed when the lever is down.

Outside air for combustion is optional unless required by federal, state or local building codes. See the section of this manual providing the instructions for installation of the combustion air assembly. The design of the fireplace allows the routing of the combustion air duct up, down, or horizontally to obtain the outside combustion air. This permits flexibility in planning your installation. Refer to *Page 18* for typical installation methods. Review the precautions and recommendations in this manual pertaining to outside combustion air installation.

WARNING: Due to the fact that this fireplace has two (2) openings, it is more susceptible to the adverse effects or drafts or pressure changes in the room or rooms it serves. The fireplace should be operated with both sets of doors closed to prevent smoke or flame spillage out of the fireplace openings caused by drafts or pressure changes. The door should only be opened during the very brief period to add wood to the fire or to remove ashes.

The fireplace is also equipped with a flue damper, which must be open when the fireplace is in use. The flue damper control lever is located inside the fireplace. The counterweighted damper is operated by simply pushing up to open or pulling down to close the damper. When the fireplace is not in use, the damper should be closed to prevent cold air from entering the chimney as well as preventing warm air in the room from escaping up the chimney.

NOTE: It is normal for a small amount of smoke to be released from the upper portion of the fireplace the first few times you use your new fireplace. This results from an oil residue on the metal. Open a door or window to allow the smoke to escape.

WARNING: Fireplaces equipped with doors should be operated only with the doors fully open or doors fully closed. If doors are left partly open, gas and flame may be drawn out of the fireplace opening, creating risks of both fire and smoke.

All fireplace chimneys are in direct contact with cold air on the exterior of the structure. Consequently, when the fireplace is not in use, cold air can fall down the chimney of the fireplace to cool off the fireplace chase. Therefore, the fireplace chase must be insulated to minimize the risk of cold air infiltration to the home. Even if the fireplace chase is adequately insulated, this cannot completely ensure that cold air infiltration into the structure will be eliminated. Cold air infiltration is a possibility with any fireplace or device that freely communicates with the air on the outside of the structure. Today's homes are more energy-efficient and, therefore, better insulated and tightly constructed. Unfortunately, when air is removed from the house, as by a bathroom fan, or consumed by a furnace, additional air is needed to replace the air consumed. Unless the additional air is supplied, this can cause a negative pressure in the home. When this happens, the house will draw in outside air from the cracks in the windows, down the fireplace flue or other locations of air leakage in the home. Because cold air infiltration may be unavoidable in some structures, MHSC is not responsible for heat loss or air infiltration through or around the fireplace.

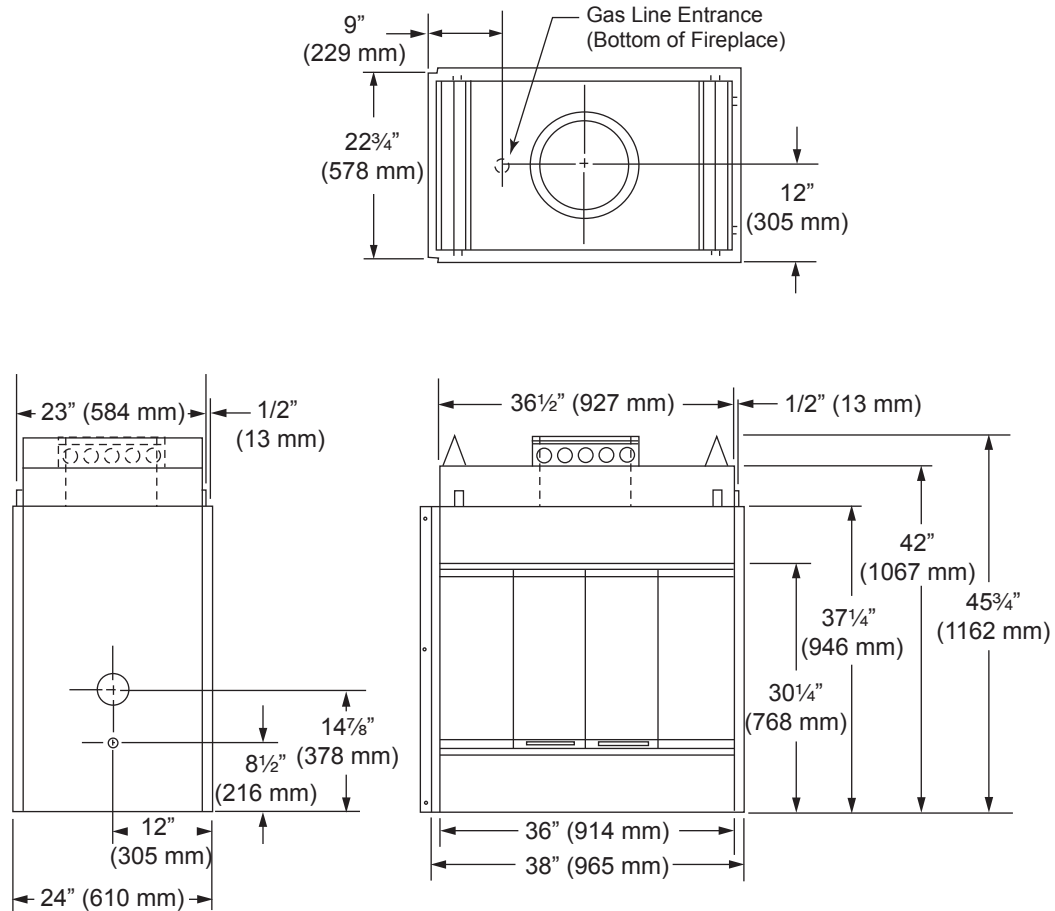


Figure 1

This fireplace does not require any special foundation. If the fireplace is to be trimmed with large stone or brick facing, an adequate foundation is required to support these materials. Refer to *Figures 1-5* as guides for selecting a location and determining the space required for the fireplace.

The location for the fireplace should be adjacent to a load-bearing wall and away from objects that will create drafts that could disturb the normal flow of air into the fire. Such objects are frequently opened doors and central heat air outlets and returns. Refer to *Figure 2* which illustrates various types of locations and installation and *Figure 3* for additional information concerning installation heights, construction details and methods of installation.

A location that requires cutting the least number of joists and rafters for the chimney installation will simplify and reduce installation costs.

Proper selection of a chimney outlet location is also important. Objects such as overhanging or nearby trees, adjacent building or embankments or unusual roof designs can all create air turbulence and interfere with chimney performance and cause the fireplace to spill smoke into the room.

Since the pitch of the roof influences the opening size required at the roof level, Table 1 should be used as a guide for sizing the roof opening.

CAUTION

Do not install fireplace over carpeting.

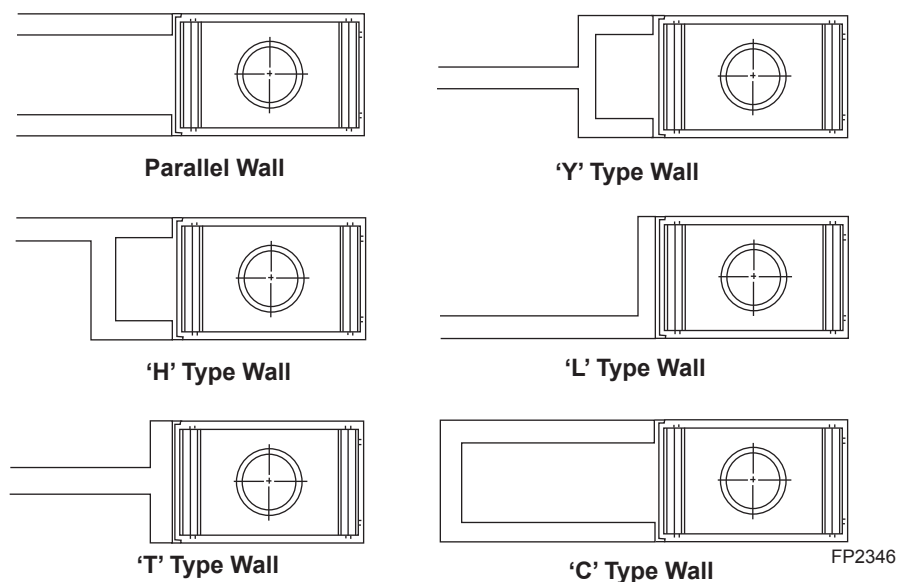
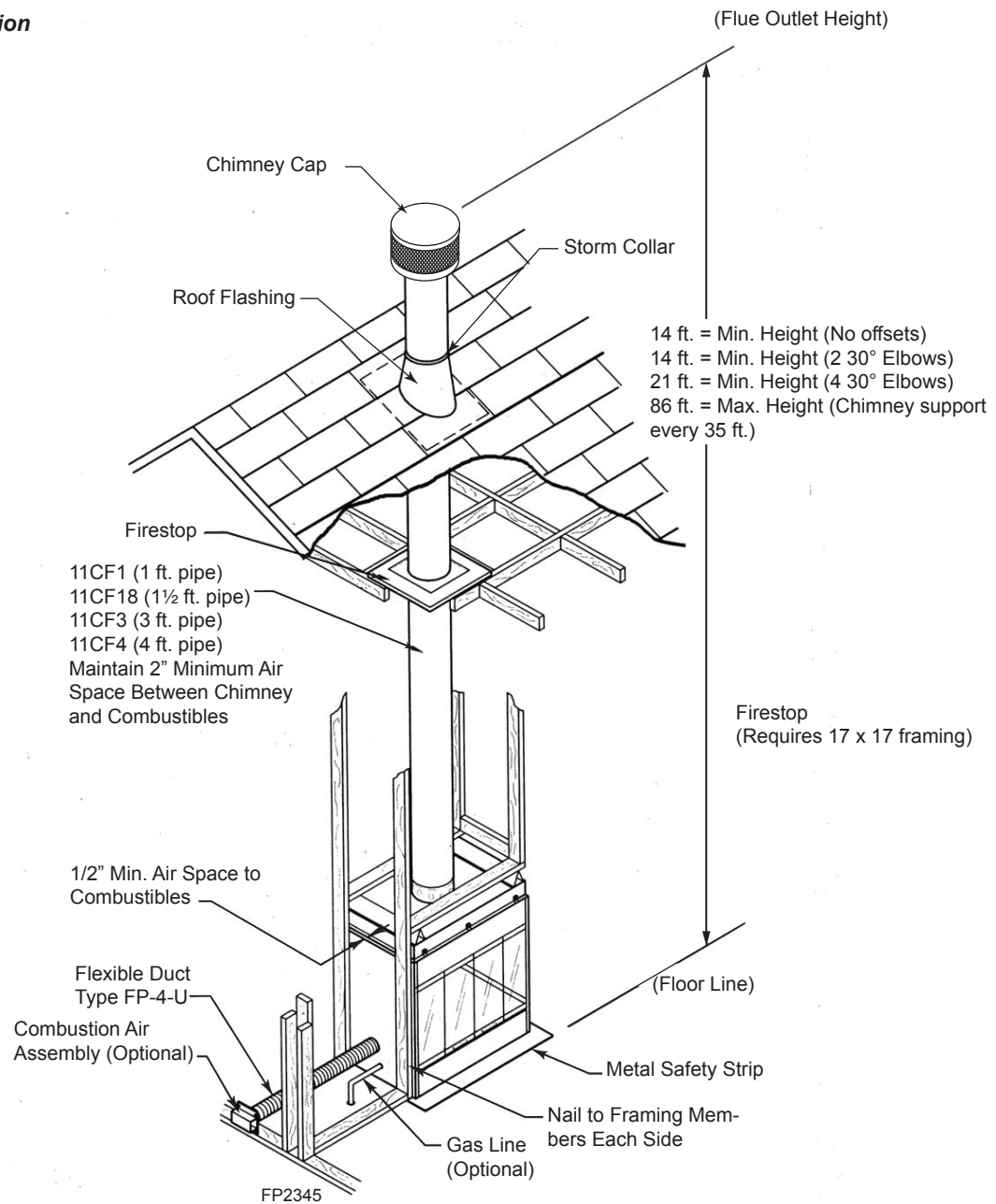


Figure 2

Figure 3
Residential Installation



NOTE

Combustible materials should not be installed below top spacer. Noncombustible materials such as brick or tile may be used to trim face or the fireplace, combustibles must not overlap the black painted face of fireplace more than 1/8".

Survey the planned location for the fireplace for overhead plumbing or electrical wires, etc., that might complicate the installation or endanger persons installing or cleaning the chimney. Avoid a location where the chimney cap will be near abrupt changes in the roof shape, nearby wall or embankments, under or near trees or above the roof of a single story wing of a two story building. *Figure 6.* All these conditions can cause turbulence or pressure conditions that can cause poor chimney draft and smoke spillage from the fireplace opening. Elbows may be used to offset the chimney to avoid obstructions or to locate the chimney cap in a preferred location. Refer to the sections of this manual pertaining to chimney offsets for instructions on proper elbow usage. Poor installation or location of the chimney cap and/or components can cause wind blown rain to enter the chimney.

If the fireplace is to be installed on an outside wall, the surrounding walls (chase) should be insulated. Failure to insulate the fireplace from outside temperatures will cause heat loss through and around the fireplace.

Single Story Installation with Attic Space

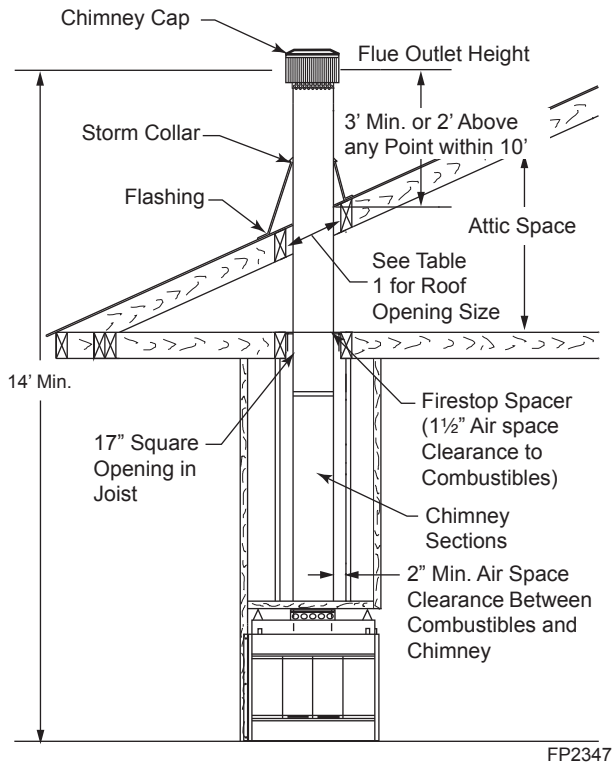


Figure 4

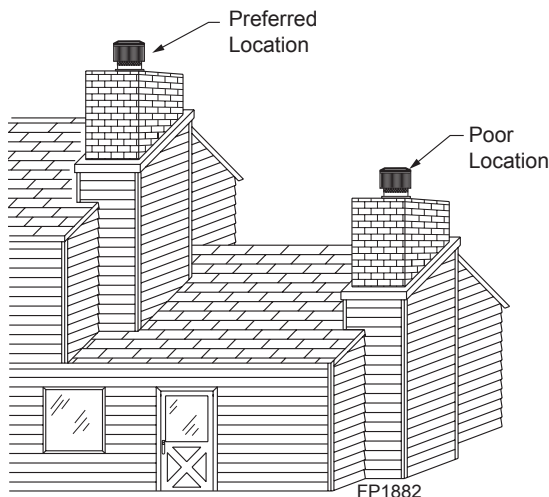


Figure 6

Multiple Story Installation

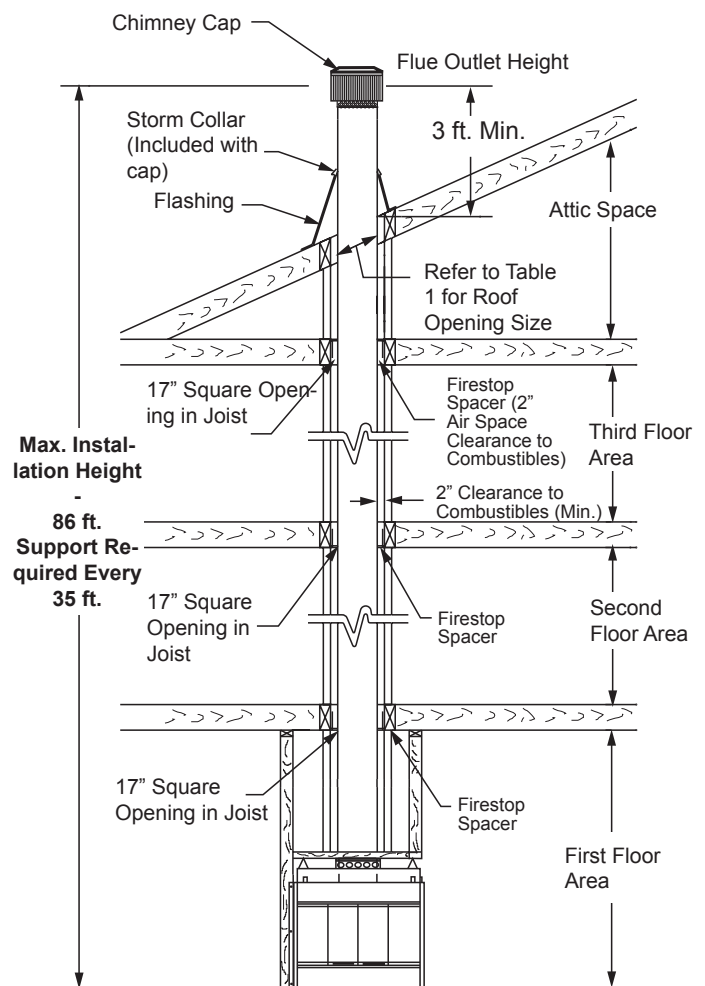


Figure 5

Figures 6 & 7

If the fireplace is recessed into the floor or the hearth is elevated with combustible materials, an MHSC H1652 hearth extension kit or equivalent must be used for additional protection.

Figure 6

The diagram illustrates a fireplace with a glass door and its required clearances. The fireplace is shown in cross-section, with a central glass door. The door is labeled "Glass Door" and has a circular handle. The top of the door is labeled "Glass". The door is set into a frame. The frame is labeled "Hearth Extension" on both the left and right sides. The left side of the frame is also labeled "Wall Shield Installed Flush with Wall Board (16\" x 36\" x 1/2\" thick Non-combustible Board with 'R' Factor of 43 or Less)". The right side of the frame is labeled "Wall Shield on top of Wall Board (Model WS or Equivalent)". The distance between the two wall shields is labeled "36\" Min.". The height of the glass door is labeled "8\"". The width of the glass door is labeled "16\"". The distance from the bottom of the glass door to the bottom of the fireplace is labeled "1/2\" Air Space". The distance from the bottom of the fireplace to the bottom of the wall shield is labeled "29\" Min.". The bottom of the wall shield is labeled "Finished Combustible Wall Clearance from Fireplace Screen Opening".

Hearth Extension

Wall Shield Installed Flush with Wall Board (16" x 36" x 1/2" thick Non-combustible Board with 'R' Factor of 43 or Less)

Glass

Glass Door

Hearth Extension

Wall Shield on top of Wall Board (Model WS or Equivalent)

36" Min.

8"

16"

1/2" Air Space

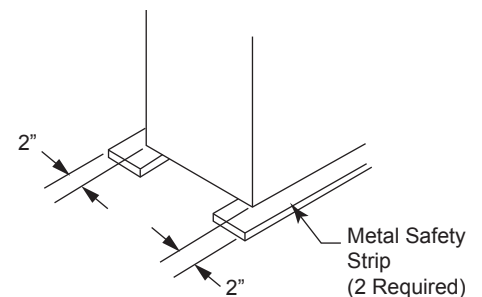
29" Min.

Finished Combustible Wall Clearance from Fireplace Screen Opening

FP2349

Diagram 7 illustrates the installation minimums for the FP2350 fireplace unit when no wall shields are used. The unit is shown within a hearth extension. Key dimensions and components labeled include:

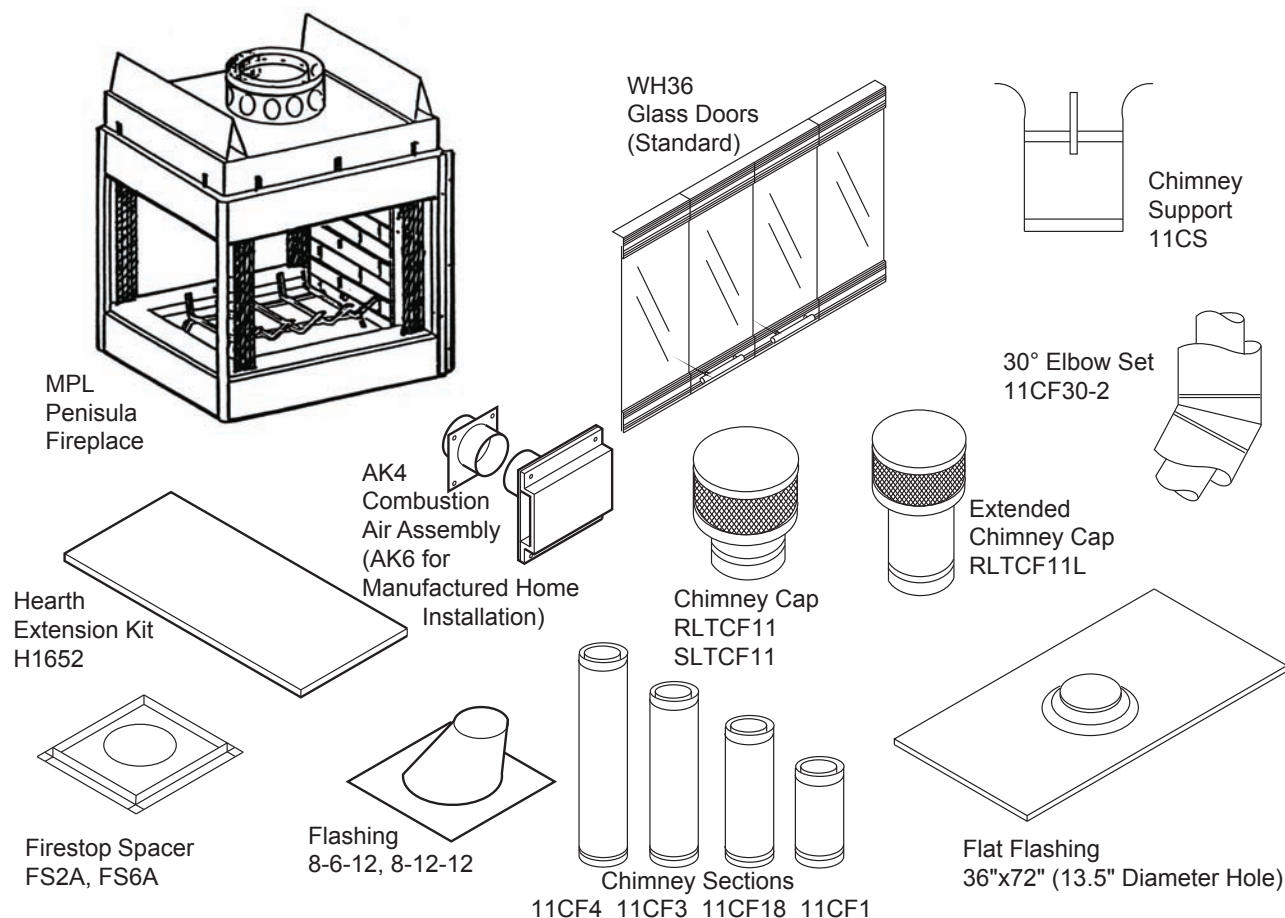
- 8"**: Clearance between the top of the unit and the hearth extension.
- Glass**: Points to the top glass panel of the unit.
- Glass Door**: Points to the front glass door of the unit.
- Hearth Extension**: The structure surrounding the fireplace unit.
- 4" Min.**: Minimum clearance between the base of the unit and the hearth.
- FP2350**: The model number of the fireplace unit.
- Installation Minimums with No Wall Shields**: Text indicating the conditions for these dimensions.



FP2183

2"

Special 'Z' Metal Safety Strip
(2 Required)



Model Number	Description
MPL11	Peninsula Style Fireplace
11CF1	12" chimney section
11CF18	18" chimney section
11CF3	36" chimney section
11CF4	48" chimney section
11CF30-2	30° elbows (package contains two 11" diameter elbows) One pair is required for each offset.
11CS	Chimney support (required when chimney height exceeds 30 feet)
SLTCF11	Chimney cap for contemporary installations.
RLTCF11	Round chimney cap for contemporary installations.
RLTCF11L	Extended chimney cap for contemporary installations.
8-6-12	0-6/12 pitch flashing for contemporary installation.
8-12-12	6/12 to 12/12 pitch flashing for contemporary installation.
FS2A	Vertical Firestop spacer - One required at each ceiling or floor level.
FS6A	30° Firestop spacer - for 30° chimney incline through ceiling or floor.
FP-4-U	4" flexible combustion air duct-8-foot lengths.
403	4-inch duct connector (for splicing FP-4 ducts). Includes two clamps.
AK4	4" outside combustion air assembly.
WH22	End glass door assembly (1 required)
WH36	Glass door assembly (2 required)

Location Selection

Unpack and check the fireplace and chimney for damage. If any items have been damaged, report this to your dealer. Before beginning the installation, be sure you have the proper parts in sufficient quantity. Refer to replacement parts page for proper identification of parts. Do not substitute parts. Use only parts listed for use with the Model MPL11 fireplace.

Fireplace Installation

1. Refer to *Figure 3* for an example of a typical installation of the fireplace components.
2. Be sure the location of the fireplace will provide the required clearances indicated by *Figures 3, 4 & 5* and the minimum chimney air space clearance to combustibles of 2".
3. Set the fireplace in the desired location and be sure it is securely supported and leveled. Check the face of the fireplace with a carpenter's level and if it is not plumb; correct it by placing shims under the edges of the fireplace.
4. Block in the fireplace to prevent any shifting of the firebox. Secure the fireplace with nails or screws through the flanges located on each side of the fireplace. Do not enclose the fireplace until the combustion air duct and chimney pipes are installed.

NOTE: Some local codes may require electrically grounding the fireplace and chimney.

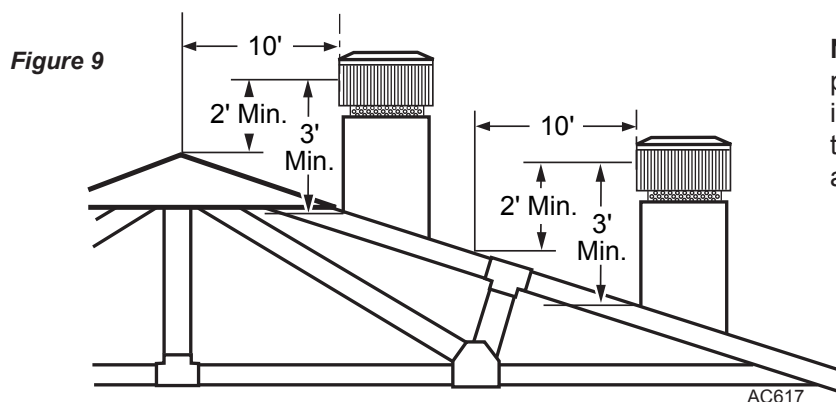
Chimney Installation

In order to assure safe and satisfactory performance of the fireplace, it is very important to properly install the chimney. This is an important part of the installation and the sections of this manual pertaining to chimney installation should be reviewed very thoroughly.

For your safety, some of the important things to remember in regard to chimneys are listed below:

1. Use only parts and accessories labeled for use with this fireplace.
2. Use only undamaged parts and accessories.
3. Enclose the chimney where it passes through the living spaces to prevent contact with and possible damage to the chimney.
4. Install firestop spacers at each ceiling level.
5. Install the proper chimney cap or chimney housing on the chimney to prevent the entry of rain and debris into the chimney and to assure the proper venting of smoke.
6. Do not use more than four (4) elbows in the chimney.

NOTE: To select the proper chimney height, refer to *Figure 3*. The flue outlet must be a minimum of 3' above the highest point where the chimney penetrates the roof and a minimum of 2' above all portions of the building within 10'. If the chimney is to include elbows to offset the chimney, refer to the Chimney Offset and Cap Installation section of this manual. There must be at least 2" air space between all sections of the chimney and combustible materials between floors.



NOTE: Flue outlet should be 24" above all portions of the building within 10' as shown in the illustration. The chimney must not extend more than 90" above the roof without additional support.

Figure 10

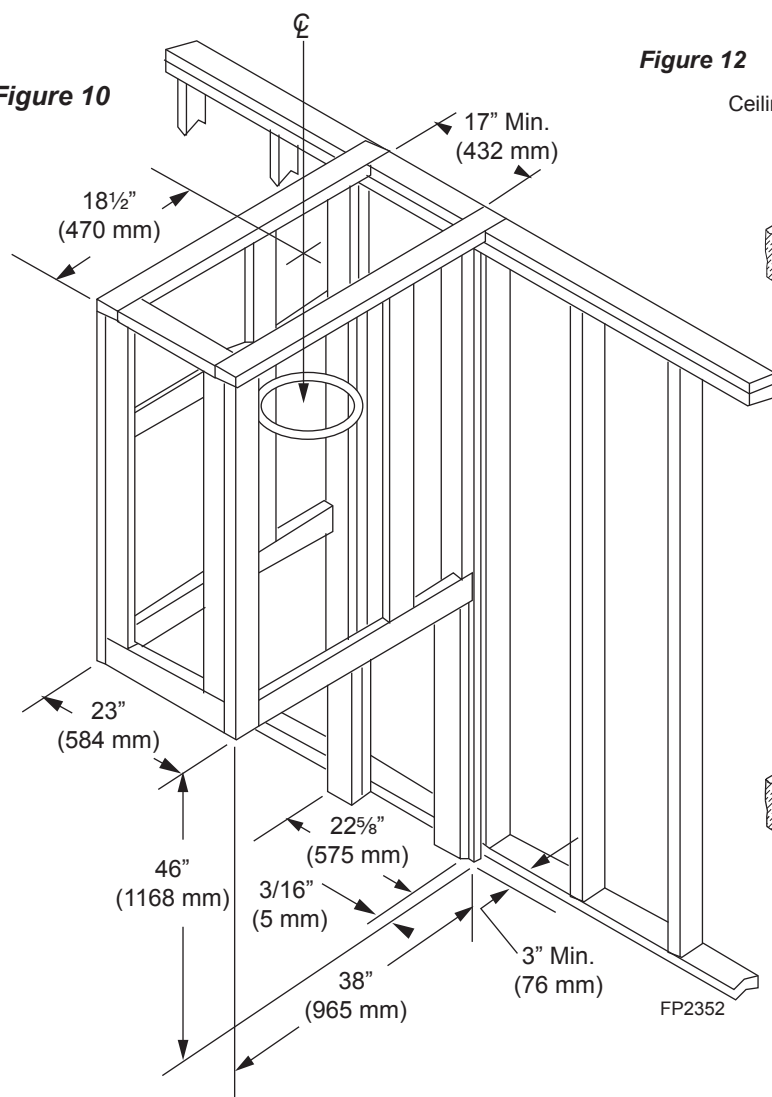
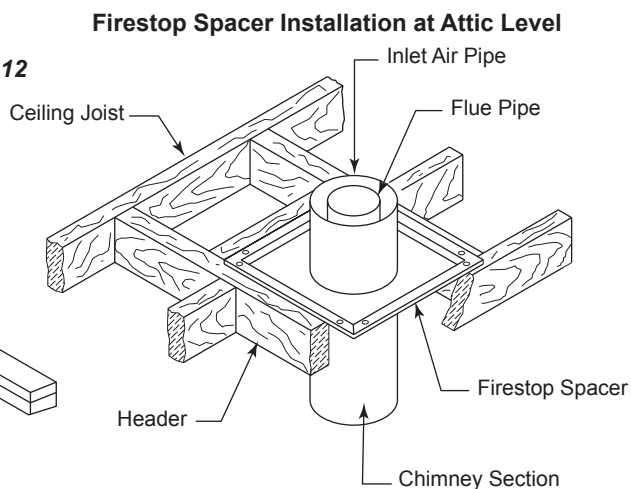


Figure 12



Firestop Spacer Installation at Floor Levels

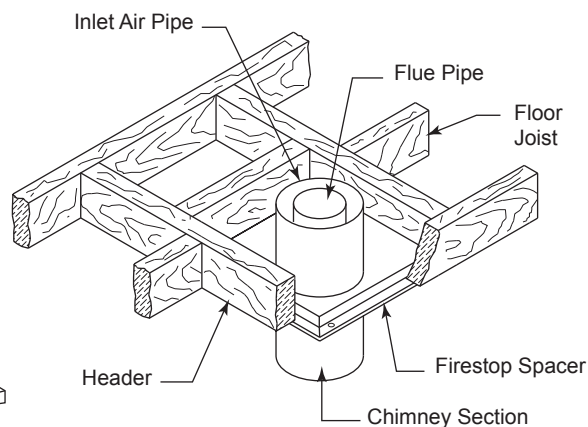


Table 1
CHIMNEY HOLE SIZE

Size of Chimney	Angle of Chimney at Ceiling	
	Vertical	30°
11" CF 2-Wall	FS2A 17 1/2" x 17 1/2" (445 x 445 mm)	FS6A 17 7/8" x 29 5/8" (454 x 753 mm)

Figure 11

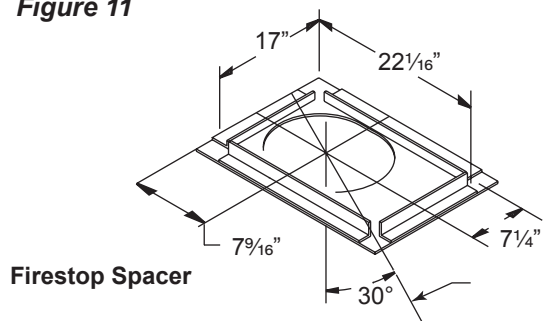
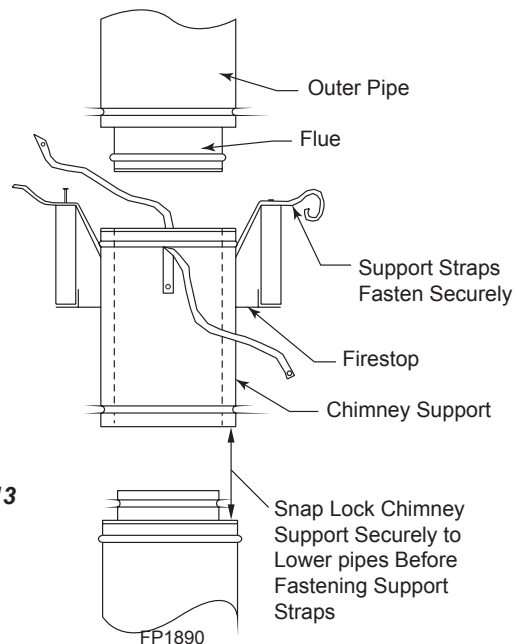


Figure 13



1. Lay out, cut and frame openings through all ceilings and the roof at the point where the chimney will pass through. Unless the chimney is to be offset, the point where the center line of the chimney will pass through the ceiling and roof can be determined with a plumb line as shown in *Figure 10*. The fireplace should be located in the planned installation position. After the center line is established and a nail is driven to mark the point, the opening can be cut if you are satisfied with the chimney location relative to ceiling and roof joists and/or any other obstructions. The roof opening center line should be marked by driving a nail through the roof from underneath that will penetrate the roof and can be located from the rooftop. If the chimney is to penetrate a pitched roof, the hole in the roof must be rectangular instead of square and should be sized according to Table 1.
2. Install the firestop spacer as required from beneath the ceiling unless the space above is attic space. In an attic, the firestop spacer should be installed at the floor level of the attic. You must have joists or headers on all four sides of the spacer and use a minimum of four 8-penny nails to secure the spacer.
3. To install the chimney sections, insert the male end of the flue, the smallest diameter pipe, into the flue outlet of the fireplace and press down until the snap locks engage. Continue the process, adding the chimney sections on top of each other until the chimney is at least six inches above the roof opening on all sides. As the chimney sections are installed, check each joint to make sure it is properly locked to the previous section. If additional strength of the outer pipe joints is desired, you may use two or three sheet metal screws placed through the area where the outer pipes overlap one another. To install these screws, drill a 1/8-inch diameter hole through the chimney sections, taking care not to penetrate the inner flue pipe. **WARNING:** Be very careful when drilling the holes into the outer pipe. The drill must not penetrate the inner stainless steel pipe.

NOTE: If you intend to have a total fireplace installation of more than 30 feet you must use chimney support model 11CS at or below 30 feet to support the weight of additional chimney pipe.

To install the chimney support, place the crimped end of the flue and outlet air duct portions into the last section of chimney pipe. Push down until the outside or inlet air duct of the chimney support overlaps and snap locks the chimney support into the chimney section.

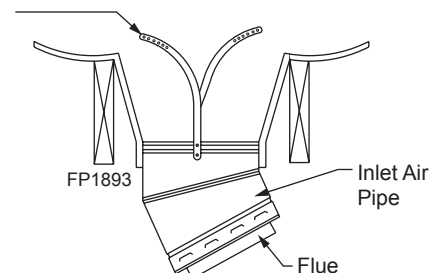
Nail the support straps tightly to a building frame member or ceiling joist as shown by *Figure 14*. You must use at least two 8-penny nails per strap.

Elbow Installation

The following are important points that should be observed when installing elbows on the fireplace:

1. The support straps of all elbows not installed directly on top of the fireplace should be nailed securely to the surrounding structure. This allows the support strap to carry the weight of the chimney above the elbow and prevents this weight from breaking the elbow or chimney sections apart.
2. Elbows should not be used in any combination that inclines the chimney more than 30 degrees from vertical.
3. The limitations on the quantity of elbows per chimney are as follows: If the total height of the fireplace and chimney is—13' or more — two (2) elbows may be used in the chimney. 21' or more — four (4) elbows may be used in the chimney.
4. The inclined portions of chimneys that pass through living spaces likely to be used for storage should be enclosed to avoid contact with and possible damage to the chimney. The minimum air space of 2" between the chimney and enclosing materials must be maintained.
5. The length of the inclined portion of chimney between elbows must not exceed 6' when unsupported or 20' if the chimney is supported at 6' intervals with support such as metal support straps.
6. When enclosing the elbows and inclined portions of the chimney, enclosing materials must be installed vertically to maintain the required 2" minimum air space clearance to the chimney at the extremities of the offset. It is recommended that enclosing material not follow the inclined portions of the chimney.

Figure 14



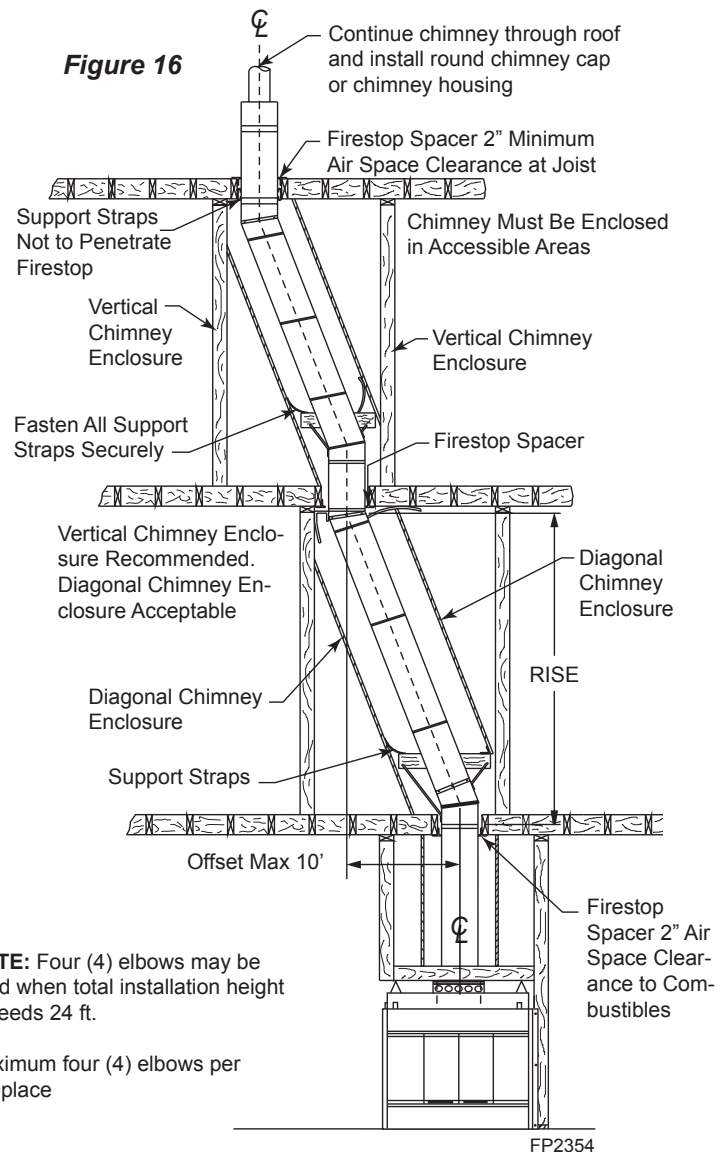
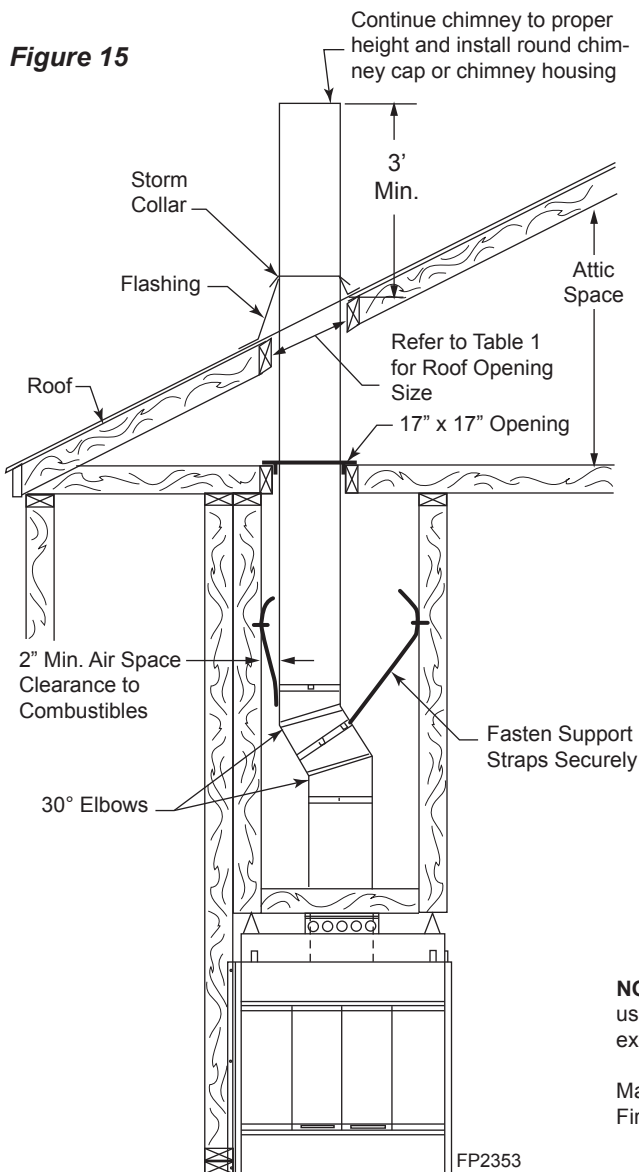
All four (4) support straps must be nailed on to framing member around the elbow with a minimum of two (2) 8-Penny nails per strap

NOTE: Although both halves of the elbow set may have tie straps, only the top half must be secured. The bottom elbow half is not required to be secured for added stabilization of pipe.

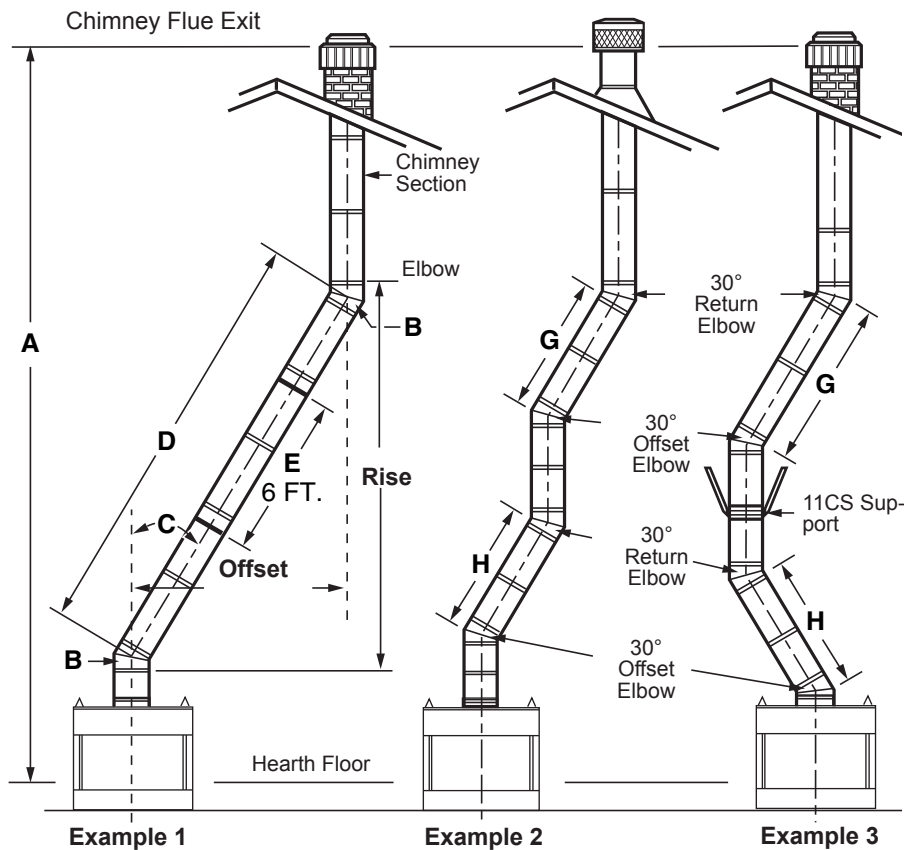
Offset Installation Sequence

1. Determine the location and amount of offset required, then select the combinations of chimney sections and elbows required from the offset chart. *Refer to Page 15.*
2. Install the first elbow by placing the extended flue into the mating part of the fireplace or chimney section. Push down until the outside or inlet air duct of the elbow overlaps and the snaps lock the elbow into the fireplace or chimney section.
3. Nail the support straps to the framing member with a minimum of two 8-penny nails per strap.
4. Install the sections of pipe between elbows until the proper number of chimney sections have been installed.
5. Install the second elbow to return the run of the chimney to vertical.
6. Nail the support straps of the second elbow to a building frame member.
7. Continue installing the vertical portion of the chimney.

NOTE: If the inclined portion of the chimney passes through a floor or ceiling, a firestop spacer should be installed to provide the firestop and support required. Be sure proper spacing is maintained between the chimney and combustibles.



Chimney Requirements - Offset Installations



Notes: G + H cannot exceed 20 feet.

*11CF Chimney airspace clearance = 2" minimum.

FP269

Illustration Key

The following safety rules apply to offset installations (letters correspond with illustration above):

A. Height of the chimney is measured from the hearth to the chimney exit.

	MPL11
Max.:	86'0"
Min.:	
0 Elbows	14'0"
2 Elbows*	14'0"
4 Elbows*	21'0"

B. Do not use more than 4 elbows per chimney.

Attach the straps of the return (top) elbow to a structural framing member.

The offset (first) elbow of any pair does not have straps.

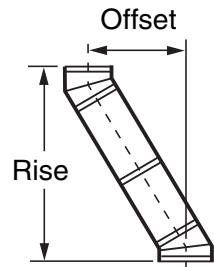
C. The chimney cannot be more than 30° from the vertical plane in any installation.

D. The maximum length of the angled run of the **total** chimney system is 20 feet. (G plus H cannot exceed 20 feet.)

E. A chimney support (Model 11CS) is required every 6 feet of angled run of chimney. Chimney supports are required for every 30 feet and 60 feet chimney height above the hearth.

Determine the offset distance of your chimney arrangement from the centerline of the fireplace to the centerline of the chimney where it is to pass through the first ceiling.

NOTE: This offset distance may not be your full offset distance. See Examples 2 and 3.



FP282

30° Elbow Offsets

1'	1½'	3'	4'	Chimney Support	Offset	Rise
0	0	0	0	0	3"	11"
1	0	0	0	0	8¼"	20"
0	1	0	0	0	11¼"	25¼"
2	0	0	0	0	13½"	29¼"
1	1	0	0	0	16½"	34¼"
0	0	1	0	0	20¼"	40¾"
2	1	0	0	0	21¾"	43½"
0	0	0	1	0	26¼"	51¼"
0	1	1	0	0	28½"	55¼"
1	0	0	1	0	31½"	60¼"
0	1	0	1	0	34½"	65½"
0	0	2	0	0	37½"	70¾"
1	1	0	1	1	41½"	77¾"
0	0	1	1	1	45"	83¾"
0	1	2	0	1	47¼"	87½"
0	0	0	2	1	51"	94"
0	1	1	1	1	53¼"	98"
0	0	3	0	1	56¼"	103¼"
0	1	0	2	1	59¼"	108½"
0	0	2	1	1	62¼"	113½"
0	1	3	0	1	64½"	117½"
0	0	1	2	1	68¼"	124"
0	1	2	1	1	70½"	128"
0	0	0	3	1	74¼"	134½"
0	1	1	2	2	78"	140¾"
0	0	3	1	2	81"	146"
0	1	0	3	2	84"	151¼"
0	0	2	2	2	87"	156½"
0	1	3	1	2	89¼"	160¼"
0	0	1	3	2	93"	166¾"
0	1	2	2	2	95¼"	170¾"
0	0	0	4	2	99¼"	177¾"
0	1	1	3	2	101¼"	181¾"
0	0	3	2	2	104¼"	186¼"
0	1	0	4	2	107¼"	191½"
0	0	2	3	2	110¼"	196¾"
0	1	3	2	3	114"	203¼"
0	0	1	4	3	117¾"	209¾"
0	1	2	3	3	120"	213½"
0	0	0	5	3	123¾"	220"

Figure 17

NOTE: The proper height as previously explained is important to assure proper draft and safety. The chimney cap extends the flue outlet four inches above the top of the last section of chimney. This should be kept in mind when determining the proper height for the chimney. The chimney should not be extended more than 90 inches above the supporting roof structure without additional support. In the case of an 'A' frame type construction or other steep pitch roofs that require more than 90 inches of chimney above the roof, a support should be attached to the chimney at the 90 inch level that is strong enough to support a wind load of 3½ pounds for each inch the chimney extends above 90 inches. The flue outlet must be a minimum of three feet above the point where it penetrates the roof.

CAUTION: Be careful to avoid electrical shock hazard when contacting wires to the metal chimney components.

1. Extend the regular chimney sections until the top of the chimney is 4" below the total flue height desired. Do not snap the last section of inlet air duct or largest diameter pipe in place until Step 3 is completed.
2. Remove the shingles from around the chimney so that the flashing may be installed, with the upper part of the flashing under the shingles.
3. Set the flashing on the roof. Hold a section of the outside pipe (13" diameter) on the flashing and scribe a line around the flashing, then cut the top off the flashing by cutting 1/4 inch below the scribed line. This should increase the diameter of the flashing outlet sufficiently to allow the flashing to be placed over the chimney. *Figure 18*
4. Snap the last section of inlet air duct in place and slide the flashing over the chimney. Adjust the chimney to assure that the proper minimum clearances are maintained.
5. Nail the flashing securely in place with eight nails.
6. Seal the crack between the top of the flashing and the chimney with mastic. Leave some excess mastic at this area to be used in step eight. **NOTE:** Use pliers and wear gloves when performing step seven to minimize the danger of cutting your hands on the edge of the storm collar.
7. Place the storm collar around the chimney and put the collar together like a belt in belt loops. Slide the end of collar under the two loops on the other end with the loops facing up. Overlap the ends of the collar until it is tight against the chimney. Bend the free end of the collar back over the loops to hold the storm collar securely together. The excess end of the storm collar may be trimmed off.
8. Slide the storm collar down snugly against the flashing until the excess mastic left in step six is forced up into the crack between the storm collar and the chimney. This should make the joint between the flashing and the chimney watertight.
9. Install the chimney cap by placing the cap into matching parts of the last chimney section. Then punch or drill 1/8 inch diameter holes in the inlet air duct (chimney pipe) where specified on the brackets and fasten it down with the No. 8 screws provided. Do not penetrate the inner stainless steel pipe while installing the screws.
10. Check all the parts of the fireplace, chimney and chimney termination cap to assure that no parts have been damaged or bent during installation and that all parts have been installed properly.

NOTE: The metal used for the chimney cap has a rust protective coating but the cut edges of the parts are not protected. To prevent rusting and rust staining of nearby structures, exposed parts of the chimney and chimney cap should be detergent washed and painted with a galvanized primer paint.

Figure 18

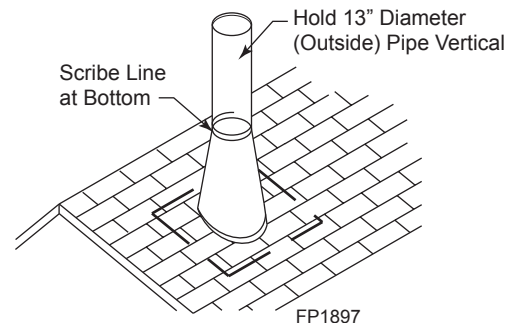
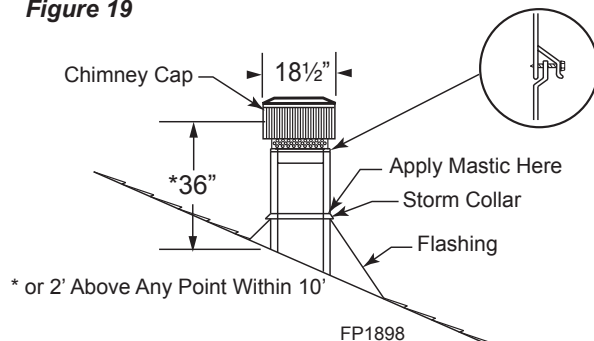


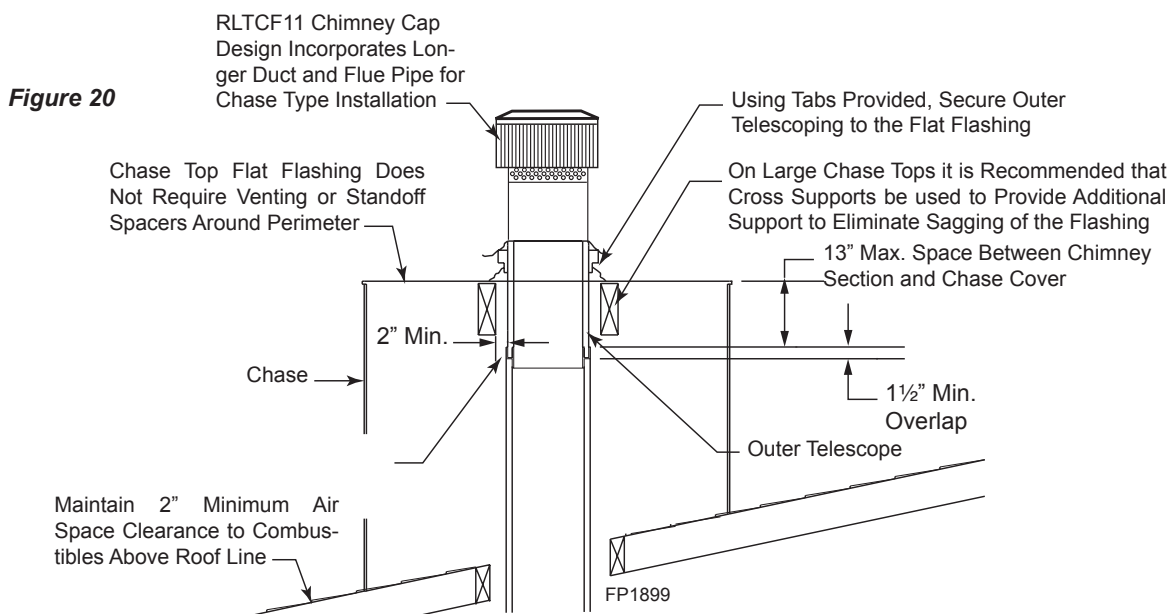
Figure 19



NOTE: RLTCF11L chimney cap is same as RLTCF11 with the exception of a longer telescoping pipe which may be needed for special installations such as chase installations.

1. Extend the regular chimney sections until the top of the chimney is 4" below the total flue height desired. Do not snap the last section of inlet air duct or largest diameter pipe in place until Step 3 is completed.
2. Remove the shingles from around the chimney so that the flashing may be installed, with the upper part of the flashing under the shingles.
3. Set the flashing on the roof. Hold a section of the outside pipe (13" diameter) on the flashing and scribe a line around the flashing, then cut the top off the flashing by cutting 1/4 inch below the scribed line. This should increase the diameter of the flashing outlet sufficiently to allow the flashing to be placed over the chimney. *Figure 19*
4. Snap the last section of inlet air duct in place and slide the flashing over the chimney. Adjust the chimney to assure that the proper minimum clearances are maintained.
5. Nail the flashing securely in place with eight nails.
6. Seal the crack between the top of the flashing and the chimney with mastic. Leave some excess mastic at this area to be used in step eight. **NOTE:** Use pliers and wear gloves when performing step seven to minimize the danger of cutting your hands on the edge of the storm collar.
7. Place the storm collar around the chimney and put the collar together like a belt in belt loops. Slide the end of collar under the two loops on the other end with the loops facing up. Overlap the ends of the collar until it is tight against the chimney. Bend the free end of the collar back over the loops to hold the storm collar securely together. The excess end of the storm collar may be trimmed off.
8. Slide the storm collar down snugly against the flashing until the excess mastic left in step six is forced up into the crack between the storm collar and the chimney. This should make the joint between the flashing and the chimney watertight.
9. Install the chimney cap by placing the cap into matching parts of the last chimney section. Then punch or drill 1/8 inch diameter holes in the inlet air duct (chimney pipe) where specified on the brackets and fasten it down with the No. 8 screws provided. Do not penetrate the inner stainless steel pipe while installing the screws.
10. Check all the parts of the fireplace, chimney and chimney termination cap to assure that no parts have been damaged or bent during installation and that all parts have been installed properly.

NOTE: The metal used for the chimney cap has a rust protective coating but the cut edges of the parts are not protected. To prevent rusting and rust staining of nearby structures, exposed parts of the chimney and chimney cap should be detergent washed and painted with a galvanized primer paint.



NOTE: Locally built chase flashings must incorporate a 13 1/4 min. to 13 3/4 max. x 2" high min. flanged hole for proper installation of the RLTCF11 chimney cap.

Outside Combustion Air Recommendations (continued)

1. Extremely long runs and numerous turns in the duct leading from the fireplace to the combustion air assembly should be avoided. These conditions will increase the resistance to the free flow of air through the duct. Refer to *Figures 3 and 25* for methods of installing the outside air for combustion assemblies.
2. The combustion air assembly should be located at an exterior location, which is not likely to be accidentally blocked in any manner. The assembly should be located above the snow line to prevent blockage by snow accumulation.
3. The combustion air inlet assembly should never be mounted in a garage or storage area where combustible fumes such as gasoline might be drawn into the fireplace.
4. Combustion air can be drawn from the crawl space under a house when an adequate supply of air is provided by open ventilation.
5. Do not take combustion air from attic space or garage space.

Model AK-4 Combustion Air Assembly

1. Remove the cover plate from the 4-inch outlet opening location on the left outside of the fireplace. DO NOT remove the cover if the outside air will not be connected.
2. Place the insulation ring between the AK-4 starting collar and fireplace wall and place the starting collar (4 inch) into the hole on the left side of the fireplace. Fasten it in place with the four sheet metal screws provided.
3. Cut a 6-inch diameter opening for model AK-4 in the outside wall covering where the outside vent is to be located.
4. Select and cut a piece of duct sufficient length to attach to the fireplace and protrude at least three inches beyond the face of the wall to which the AK-4 inlet air vent will be attached. The duct may be cut with a standard pocket knife (use FP-4 U duct for maximum efficiency and safety). Do not use a combustible duct. Always use UL Listed Class 0 or 1 duct material.
5. If the duct is the insulated type, push the insulation back from one end of the duct approximately two inches.
6. Slip the exposed end of the duct over the starting collar on the fireplace.
7. Using the sheet metal screws provided, secure the duct end to the collar attached to the fireplace.
8. Nail or screw the combustion air assembly to the surface of the wall.

NOTE: If the wall covering is brick or stone, use appropriate masonry fasteners. Mount the combustion air assembly with "TOP" upward to prevent cold air from entering through the wall. If it is necessary to splice the duct, a model 403-duct connector should be used to splice duct sections.

Figure 21

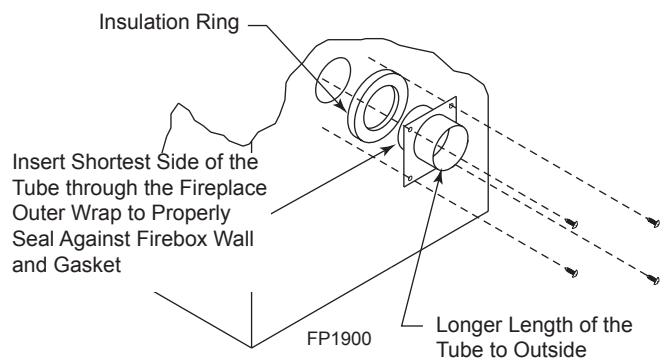
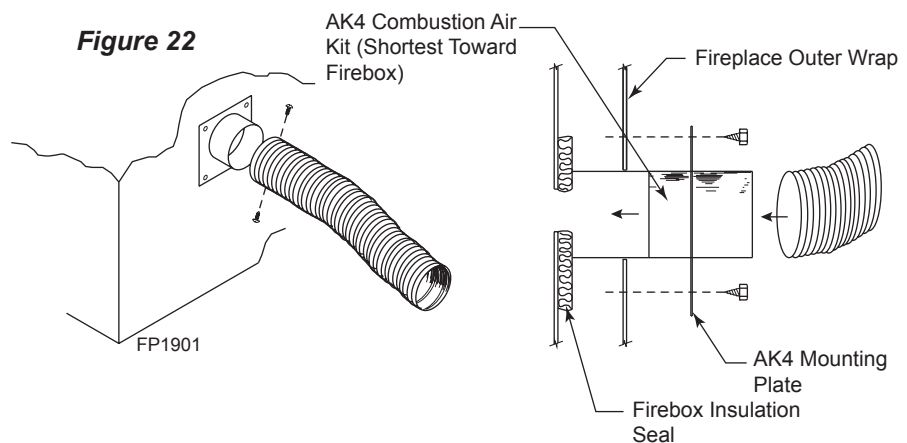


Figure 22



Installing Model 403 Duct Connector

1. Push insulation back approximately 2" from the end of each duct.
2. Slip each duct over duct connector until an equal length of connector extends into each duct.
3. Place duct clamp over the end of each duct. Tighten duct clamp down snugly.
4. Push insulation back into place and over duct clamp.

Figure 23

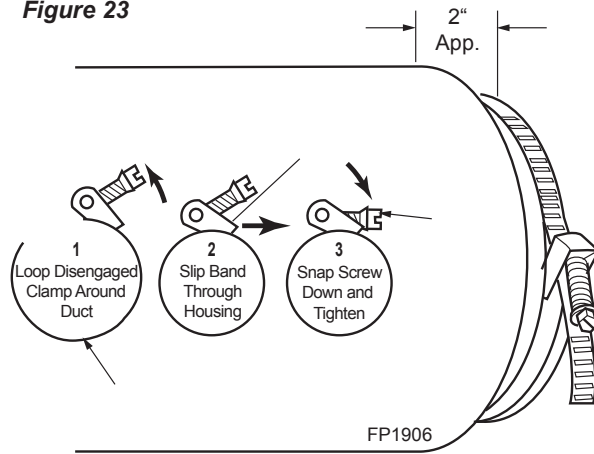


Figure 24

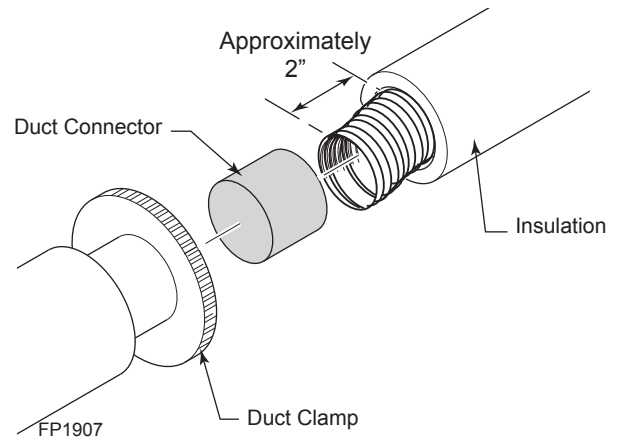
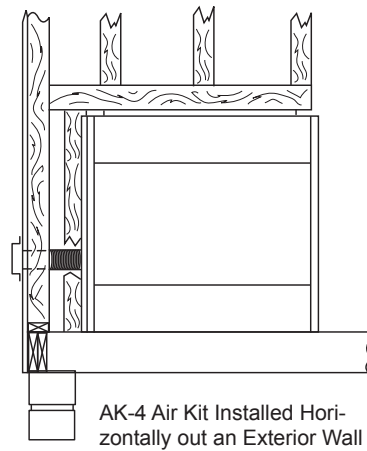
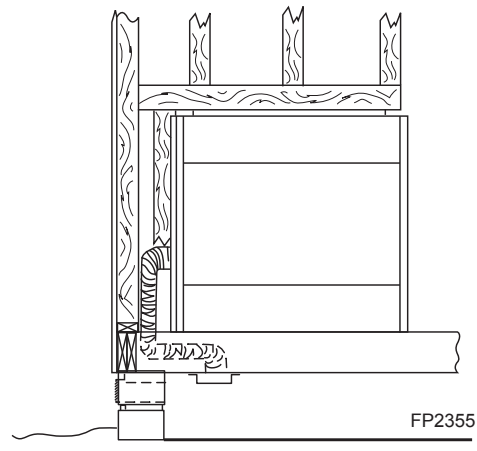


Figure 25

Typical Methods of Outside Air Kit Installation



AK-4 Air Kit Installed Horizontally out an Exterior Wall



AK-4 Air Kit Installed Downward into an Adequately Vented Crawl Space

FP2355

WARNING: Improper installation or operation of a gas appliance in this fireplace can allow unburned gas to leak out which will cause a fire or explosion hazard, or the release of poisonous carbon monoxide into the dwelling which can cause serious injury or death to its inhabitants. To reduce these risks to a minimum, the following important notices and instructions should be read and followed carefully.

MHSC fireplaces are designed to accept a 1/2 inch gas line for installation of an approved gas appliance. (MHSC manufactures a wide variety of gas logs for use in MHSC fireplaces.)

Be sure to have the appliance installed in accordance with building codes.

IMPORTANT NOTICES:

Gas pipe installation is intended for connection to a decorative gas appliance only when (1.) incorporating an automatic shutoff device and (2.) complying with the Standard for Decorative Gas Appliances for Installation in Vented Fireplaces (ANSI Z21.60) **or** Gas-Fired Log Lighters for Woodburning Fireplaces.

1. The provision for a gas line is intended for connection to a decorative gas appliance which and complies with the Standard for Decorative Gas Appliances for Installation in Vented Fireplaces, ANSI Z21.60. If a decorative gas appliance is installed, it must be installed in accordance with the National Fuel Gas Code, ANSI Z223.1.

If an unvented gas appliance (blue flame) is installed it must incorporate an automatic shutoff device, and must be installed in accordance with the National Fuel Gas Code Z223.1, Latest edition.

CAUTION: If an unvented gas appliance is installed in the fireplace, the gas appliance must only be operated with the fireplace glass door fully open (if included).

The installer of the fireplace and gas appliance must describe the operation of the fireplace and appliance to the people who will be operating them and leave all instruction manuals with the operator of the fireplace.

BTU input of a gas appliance installed in fireplace should be rated less than 100,000 BTU/Hr.

NOTE: When installing an ANSI Z21.11.2 ventless appliance, the finishing material used for the mantel must be rated at 250°F or greater.

2. An approved gas shut off valve must be located outside the fireplace in an area accessible to the users of the fireplace.
3. All gas piping and fitting must be either steel or malleable iron. Unions must be of the ground joint type.

4. Some code authorities prohibit or place restrictions on the use of gas appliances in fireplaces. Check with local code authorities before proceeding with the installation.
5. The gas appliance and all connecting gas piping should only be installed by a licensed gas appliance installer.
6. The installer should advise the persons who will use the fireplace to set the fireplace damper in full open position when the appliance is in use.

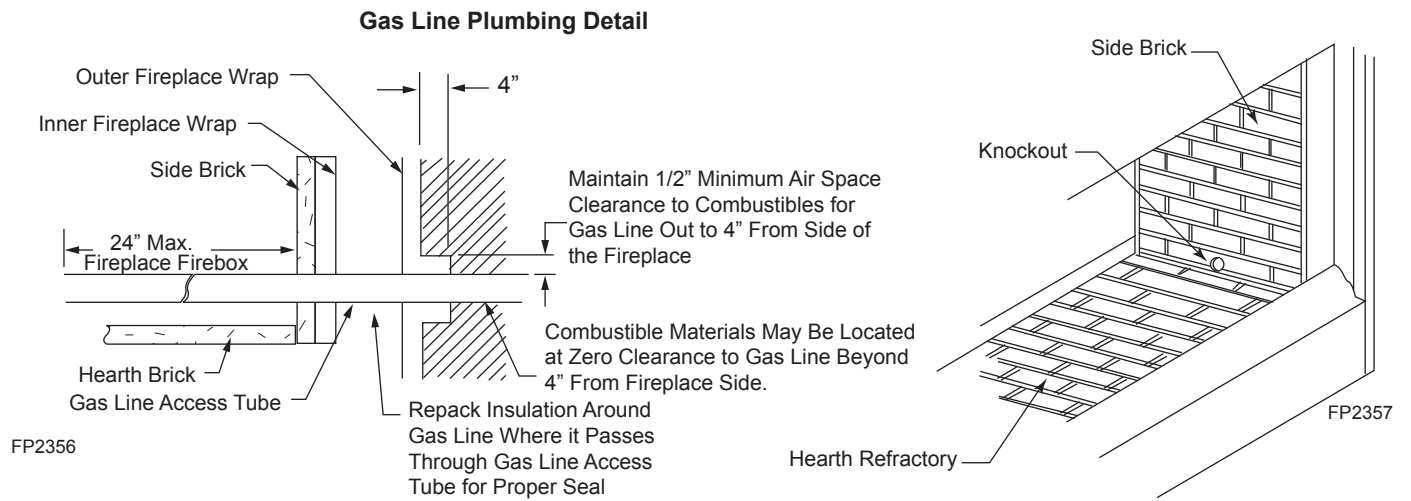
The following instructions only apply to passing the gas line through the fireplace wall. Follow the instructions provided by the appliance for the gas line, testing and adjusting it.

1. Locate the recessed area in the side refractory panel as shown by *Figure 26*.
2. Tap out a round hole in the brick liner with a hammer by tapping lightly on the recessed area.
3. Remove the two screws that hold the cover plates on the jacket wrap and discard the cover plate.
4. Use a screwdriver or similar tool to push the loose insulation out of the tube between the firebox and the outer jacket of the fireplace.
5. Install the gas pipe through the tube between the firebox and jacket.

NOTE: Gas pipe should not come in contact with any wood structures until it has reached a point at least one (1) inch away from fireplace side.

6. Attach the gas appliance to the gas pipe according to the appliance makers instructions.
7. Pack the insulation removed in step 4 around the pipe to prevent air flowing through the tube either into or out of the firebox.
8. Be sure the gas is turned off at the appliance, then turn the gas on at the cut off valve and test the gas line connections for leaks with soapy water solution or a liquid leak detector. **DO NOT USE A MATCH OR OTHER FLAME SOURCE TO CHECK FOR GAS LEAKS.** If a gas leak is detected, turn the gas off immediately and fix the leak.
9. Proceed with testing the appliance for leaks and adjusting it as required by the manufacturer instructions.

Figure 26



CAUTION: When using a gas appliance, the fireplace damper must be set in fully open position.

DECORATIVE TRIM INSTALLATION

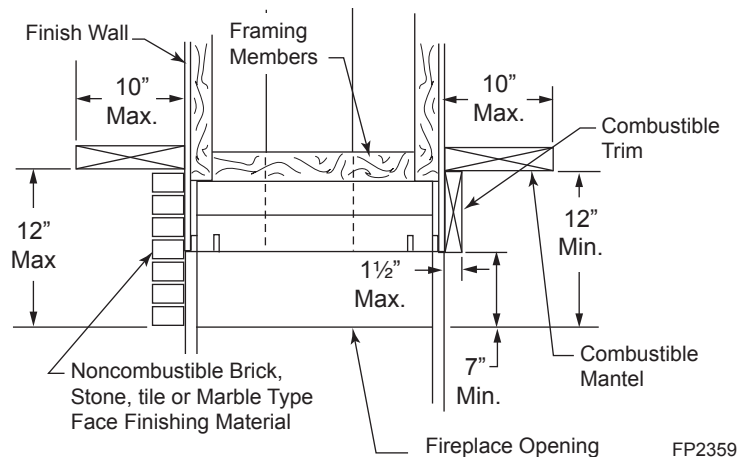
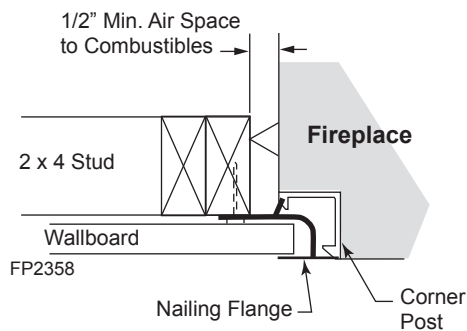
Do not allow the trim materials to extend closer than 3/8 inch to the vertical edges of the firebox opening if you plan to equip the fireplace with glass doors.

The face of the fireplace may be left exposed or trimmed with any noncombustible material such as brick, stone or marble. If a trim is installed, be sure it is fastened snugly to the face of the fireplace. A crack between the material and the face of the fireplace could pose a fire hazard and impair the proper operation of the fireplace. Blocking the fireplace with framing and attaching the base to the supporting floor will further reduce the possibility of such a crack developing.

Wall ties should be fastened to the face of the fireplace with sheet metal screws and placed in the mortar joints of masonry trim.

Combustible material must not be installed below the top spacers of the fireplace or overlap the sides of the fireplace face. Seal the face of the fireplace to the surrounding wall with noncombustible caulk or trim materials to prevent cold air leakage around the fireplace.

Figure 27



NOTE: The weight of framing and finishing materials supported solely by the fireplace unit should not exceed 250 lbs.

Heavy brick or stone facings may require an added means of support such as self-supporting legs which would extend to the floor.

GLASS DOOR INSTALLATION

This fireplace has been tested and listed for use with model WH22 End Glass Door assembly and model WH36 Bifold Door assemblies which are to be installed on the two larger open sides of the fireplace. To install these door, follow the proper instructions provided with the cartoned door assemblies.

WARNING: If a decorative gas appliance is used in the fireplace the fireplace damper must be fixed in an open position. (See additional operation information in section titled “Operation Guidelines”.)

Advantages of a Wood Burning Fireplace

These are the practical, ecological advantages of wood as a fuel. Also to be considered is the aesthetic appeal. Most of us consider a wood fire with nostalgia. We enjoy the aroma, and find the flickering light of a cozy hearth conducive to a happy remembrance of things past. Wood has a low ash content. And the little ash that remains after burning is useful in home gardening as a fertilizer and soil conditioner. **WARNING:** This appliance is not for use as cooking equipment.

Which Woods Are Best?

Each wood species offers something different in aroma or heat value, and you should consider your needs and desires before building your fire. Softwoods, like pine, spruce, and fir are easy to ignite because they are resinous. However, a fire built entirely of softwoods burns out quickly and requires frequent replenishment. While a softwood fire is not too desirable for a long evening, it's fine in the morning when you want quick warmth, or late in the evening when you want a fire that will burn out before you go to bed.

On occasion when a longer fire is desired, it's best to combine softwoods with the heavier hardwoods such as ash, beech, birch, maple, oak and hickory. These hardwood species burn less rapidly, with shorter flames, and produce steady, glowing coals.

For the most pleasing aroma, burn the wood of fruit trees such as apple and cherry, or nut trees such as beech, hickory and pecan. Such wood is generally more expensive, but a little combined with other wood, goes a long way. Start your fire with a mixture of softwood and hardwood, then add some fruit or nut wood for nostalgic aroma. Since most woods will not burn well when freshly cut, the wood you purchase should be reasonably dry. The sizes you buy are dictated by the size of your fireplace. Purchase logs that will fit when laid across your grate, and ask that the larger, heavier logs be split. Kindling should be short, easily split lengths of softwood, lumber yard or mill scraps, or twigs and branches gathered from your yard.

How To Build A Better Fire

The first three fires should be of moderate size to allow the fireplace to adjust and the bricks to cure before being subjected to larger fires. First, make sure your room is well ventilated, your damper open and the flue is unobstructed. Then make sure your wood is dry and seasoned. Unseasoned wood burns poorly and coupled with poor ventilation or an obstructed chimney, leads to smoking problems. If your fireplace is equipped with an outside combustion air assembly, open the combustion air inlet by pushing upward on the lever located above the firebrick on the left side of the firebox.

NEVER USE GASOLINE, GASOLINE-TYPE LANTERN FUEL, KEROSENE, CHARCOAL LIGHTER FLUID, OR SIMILAR LIQUIDS TO START OR “FRESHEN UP” A FIRE IN THIS FIREPLACE. KEEP ALL SUCH LIQUIDS WELL AWAY FROM THE FIREPLACE WHILE IT IS IN USE. USE OF THIS FUEL CAN CAUSE A SERIOUS EXPLOSION.

Prepare your fire by placing two logs on the iron grate or fire basket, and laying the tinder between them. Tinder may be dry scrap paper, twigs, or bark. On top place a small handful of twigs or split softwood kindling. Place more dry logs over this base. Keep logs close together, as narrow air spaces between them promote better drafts, and heat reflected between adjacent surfaces aids in raising and maintaining combustion temperatures.

You'll need a minimum of three logs, preferably four, to make a good fire. Add kindling and new logs as needed to rekindle a dying fire. New logs should be added at the rear grate after raking the coals toward the front. **DO NOT OVERFIRE THE FIREPLACE.** Overfire conditions may be created by large amounts of kindling, building scraps, or other improper fuels.

Ashes, important because they form a bed of glowing coals, should only be left to accumulate within an inch or two of the bottom of the grate. Excess ashes can be used to check a flaming fire; or to "bank" your fire, cover the logs with ashes. A "banked" fire will hold glowing coals for 8-10 hours, thereby saving a fire for later use.

Wood vs. Fossil Fuels

Compared to fossil fuels, a full cord of dry hickory weighs about two tons and is approximately equal in heating value to a ton of hard coal. On a pound basis, heavy hardwoods have about half the heating value of coal. The tabulation shows the relative densities and heat values of a variety of dry woods. Varieties at the top of the list (Dogwood) burn longer and those near the bottom (White Pine) ignite and burn quicker. A combination of both light and heavy wood is desired.

Species	Density	Heat Value	Species	Density	Heat Value
Dogwood	.70-.79	100-107	Ash	.57-.61	81-82
Hickory	.70-.74	100	Southern Pine	.51-.60	73-81
Oak	.60-.73	86-99	Elm	.50-.59	71-80
Black Locust	.69-.70	95-98	Cherry	.50-.52	70
Beech	.64-.66	89-91	Douglas Fir	.45-.51	64-69
Hard Maple	.58-.65	83-88	Spruce	.41-.44	59
Birch	.55-.64	79-86	Redwood	.33-.40	47-54
Apple	.58-.62	83-84	White Pine	.35-.37	50

A Few Words Of Caution

Beware of burning certain material in your fireplace. Among these are plastics, poison ivy twigs and stems, and chemically treated woods such as discarded poles and railroad ties. These not only create air pollution, but can induce extreme irritation for some individuals.

Use hemlock, spruce, juniper and other resinous woods with caution. They contain moisture pockets which, upon heating, "pop" with considerable vigor.

Always use a fire screen. And always "bank" a fire, or at least push all unburned fuel to the rear of the grate before leaving a fire unattended. Do not use this fireplace as an incinerator.

Because the termination of the chimney above the roof is exposed to wind and cold and the pressure changes these and other environmental conditions may cause, a sufficient chimney draft may be hard to establish at times. At other times the draft may be sufficiently disrupted to cause smoke to spill from the fireplace opening. If problems with chimney draft occur, help start chimney draft before you build a fire by holding a piece of burning paper near the flue opening at the top of the firebox to preheat the chimney. If smoke spills from the fireplace opening after the fire is burning, open a window on the up wind side of the house that is far enough away from the fireplace that the wind will not blow across the fireplace opening, push the burning wood as near the back of the fireplace as possible, and if the fireplace is equipped with glass doors, close them.

DO NOT LEAVE CHILDREN OR PHYSICALLY OR MENTALLY HANDICAPPED, OR SENILE PERSONS ALONE WITH A BURNING FIREPLACE.

Fuel Storage

Wood can be dried sufficiently for burning within a few weeks if protected from rain in a low humidity area. It is far better to cut wood and allow it to dry for a year. In all cases, the wood should be stacked so that both ends of the sticks are exposed to the air and protected from rain. The drier the wood, the more usable heat produced by the fire and less likely rapid accumulation of soot and creosote within the chimney is to occur. See the section of this manual concerning chimney maintenance for information concerning the hazards of soot and creosote accumulation. Small quantities of wood required for fire tending must be kept at least 30 inches from the fireplace.

Disposal Of Ashes

Ashes should be placed in a metal container with a tight fitting lid. The closed container of ashes should be placed on a noncombustible floor or on the ground well away from all combustible materials pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinder has thoroughly cooled. Ashes should never be placed in a container with combustible materials.

Chimney Maintenance

Creosote, Formation and Need for Removal: When wood is burned slowly, it produces tar and other organic vapors, which combine with expelled moisture to form creosote. The creosote vapors condense in the relatively cool chimney flue of a slow-burning fire. As a result, creosote residue accumulates on the flue lining. When ignited, this creosote makes an extremely hot fire.

The chimney should be inspected at least twice a year during the heating season to determine if a creosote buildup has occurred.

If creosote has accumulated it should be removed to reduce the risk of a chimney fire.

The chimney cap can be removed for inspection, maintenance and cleaning by removing three screws from the support legs and lifting upward.

When the fireplace is first in use, inspect the chimney frequently and clean the chimney any time an accumulation is observed on the flue walls. The frequency of these inspections can be increased or reduced appropriately after a pattern of accumulation has been established. Please note, however, that changes in the outside environmental conditions such as temperature and humidity or changes in the operation of the fireplace can lead to rapid buildup of soot and/or creosote.

To clean the chimney, obtain the services of a qualified and reputable chimney sweep, or remove the accumulation with brushes on wooden or fiberglass poles. Do not use metal pipes, chains, wires, etc., to clean the chimney because such items can scratch the surface of the stainless steel flue which can shorten the life of the flue and provide a rough surface for soot particles to attach to.

Be sure to cover nearby furnishing and arrange some method of catching soot and creosote particles that may fall during the chimney cleaning process. If glass doors are installed on the fireplace, they should be closed. Extra caution must be used to avoid damage to the flue damper during the cleaning process.

In addition to checking and cleaning the chimney on a regular basis, be sure to inspect the chimney before starting a fire at the beginning of each heating season. Make sure the chimney is clear from any accumulation of soot, creosote or any other debris, and that all joints are intact.

MHSC does not recommend chemical cleaners because some may contain elements that corrode the metal parts of the chimney or fireplace.

Fireplace Maintenance

At the end of each heating season or when the fireplace will not be in use for an extended time, the ashes should be removed and the hearth area should be swept as clean as is practical. The slow absorption of moisture into the ashes over a long period of time could cause a condition which would be corrosive to the metal fireplace parts.

At the beginning of each heating season, always operate the flue damper and make sure it has not become stuck from soot, creosote, etc., during the period of inactivity.

Keep the lower and upper grille panels clean and free from dirt and lint accumulation at all times to get the maximum efficiency from your fireplace.

As you use the fireplace, expansion and contraction will cause minor cracking of the hearth, back, and side refractory materials. This is normal and unavoidable. If the cracks become large enough or parts dislodge and metal behind the refractory is exposed, the refractory panels should be replaced with new panels that can be obtained from you fireplace dealer.

Glass Door Maintenance

For glass door maintenance, see instructions provided with the glass doors.

Checklist of Do's and Dont's

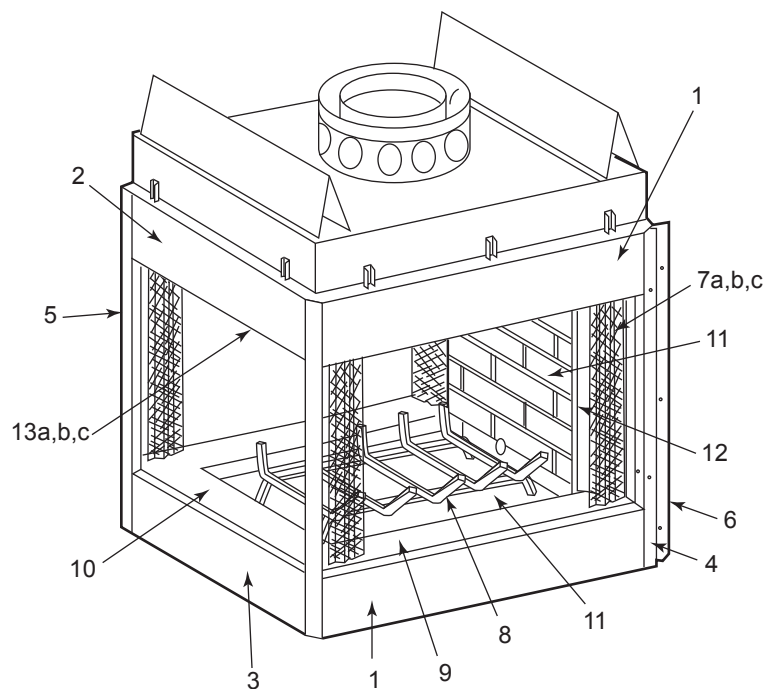
DO'S

1. Do check with local building officials to be sure the installation of the fireplace complies with all building codes and requirements and obtain required building permits. Do plan your installation with safety as you primary consideration.
2. Do use only the prescribed material and parts for the installation of the fireplace.
3. Do insulate the exterior walls surrounding the fireplace to prevent excessive heat loss from the fireplace.
4. Do trim the face of the fireplace only with noncombustible materials.
5. Do attach the noncombustible face trim material firmly to the face of the fireplace.
6. Do block in or fasten the fireplace to prevent the possibility of the fireplace shifting out of position.
7. Do enclose the chimney where it passes through living spaces or spaces accessible for storage purposes to prevent contact with and possible damage to the chimney.
8. Do install firestop spacers at each ceiling level when the chimney is installed in a multistory building.
9. Do install the proper chimney cap or chimney housing on the chimney to prevent rain and debris from entering the chimney.
10. Do keep all flammable liquids, gases and pressurized containers away from the fireplace.
11. Do check the fireplace for proper adjustment and operation before leaving it unattended for long periods of time.
12. Do inspect and clean the fireplace chimney regularly.
13. Do keep the fire screens closed when the fireplace is left unattended to minimize the danger of sparks popping out of the fireplace.
14. Do use the grate furnished with and for this fireplace.
15. Do start a fire only with paper, kindling or solid composition fire starters specifically designed for starting a fire. The use of liquid fire starter can cause an explosion within the fireplace.
16. Do place all ashes in a metal container with a tight fitting lid and place them on a noncombustible surface well away from other combustible materials until they have completely cooled.
17. Do store your fuel supply at a distance equal to or greater than the spacing recommended for combustible materials from the fireplace.
18. Do build fires of moderate intensity in the fireplace for the first three fires to allow materials to adjust and cure before being subjected to the intense heat of a large fire.

DONT'S

1. Don't allow other installations or operation considerations to take priority over safety considerations.
2. Don't attempt to use the fireplace until the installation is complete.
3. Don't use unlisted parts and accessories with the fireplace except for special flashings that may be fabricated locally.
4. Don't use damaged parts or accessories with this fireplace.
5. Don't install the fireplace in an exposed or uninsulated area.
6. Don't install the fireplace over carpeting.
7. Don't install the fireplace on a poorly constructed base or fail to fasten down or attach the fireplace to prevent it from shifting out of position.
8. Don't create or allow a crack to develop between the metal face of the fireplace and noncombustible trim.
9. Don't install the fireplace where flammable or explosive liquids or vapors are likely to be present.
10. Don't neglect all the considerations mentioned in this manual concerning clearances to combustibles, spacing from obstructions and proper chimney height when selecting the location and installing the chimney.
11. Don't allow insulating materials to contact the chimney.
12. Don't forget to support flat chase flashing to prevent water from puddling.
13. Don't neglect to apply caulking or mastic to the required joints of the flashing and between the flashing roof.
14. Don't dry clothing or other articles near the fireplace.
15. Don't store or place flammable liquids, gases or pressurized containers near the fireplace.
16. Don't neglect to instruct all responsible persons in the proper and safe operation of the fireplace.
17. Don't fail to instruct all persons, especially children and elderly persons, concerning the hazards of improper operation and unauthorized tampering with the fireplace.
18. Don't use this fireplace to burn paper, cardboard, or other debris.
19. Don't neglect to inspect and clean the chimney regularly.
20. Don't operate the fireplace with the glass fire screen doors partially open. The doors should always be fully open or fully closed.
21. Don't use gasoline, kerosene, engine oil, or charcoal lighter fluid.
22. Don't store fuel supply closer to the fireplace than the minimum spacing required for combustible materials.
23. Don't subject the fireplace to the intense heat of a large fire the first three times the fireplace is used, but build moderate fires to allow the materials to cure and adjust.
24. Don't clean the chimney with metallic devices or chemical cleaners.
25. Don't use the fireplace or chimney for venting wood or coal burning heaters or inserts unless approved in writing by MHSC.
26. Don't put combustibles within 28 inches of the fireplace opening.

“WARNING: IF NOT INSTALLED, OPERATED AND MAINTAINED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS, THIS PRODUCT COULD EXPOSE YOU TO SUBSTANCES IN FUEL OR FROM FUEL COMBUSTION WHICH CAN CAUSE DEATH OR SERIOUS ILLNESS AND WHICH ARE KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM. ALSO, OPERATION, INSTALLATION AND SERVICING OF THIS PRODUCT COULD EXPOSE YOU TO AIRBORNE PARTICLES OF GLASS WOOL FIBERS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER THROUGH INHALATION.”



Ref.	Description	Qty.	Part No.
1.	Panel, Front Ptd. Assy.	4	042988
2.	Panel, End Ptd. Assy.	1	042990
3.	Panel, End Vented Ptd. Assy.	1	043006
4.	Post, Corner Ptd. Assy.	4	043008
5.	Cap, Corner Post	2	043009
6.	Flange, Nailing Ptd. Assy.	2	043104
7a.	Panel, Firescreen w/Pull	4	026398
7b.	Rod, Curtain Rod	4	024508
7c.	Clip, Screen Rod	2	043024
8.	Grate Assy. Ptd.	1	043044
9.	Ledge, Hearth Front Assy.	4	043054
10.	Ledge, Hearth End Assy.	1	043055
11.	Firebrick, End/Base Assy.	2	042970
12.	Air Door Rod	1	043099
13a.	Damper Blade	1	047649
13b.	Rod, Damper	1	047647
13c.	Handle, Damper	1	037391

FACTORY-BUILT FIREPLACE AND COMPONENTS

(except blowers)

What is Covered and For How Long

- **Five-Year Coverage** - For five years from the date this fireplace and components are first purchased for use, MHSC will, at its option, repair or replace any defective part of this fireplace or components, or refund to you a sum not to exceed the factory retail price in effect at the time of purchase.
- **Ten-Year Coverage** - From the sixth through the tenth year following the date this fireplace or accessory is first purchased for use, MHSC will make available to you, at our factory, a free replacement for any defective part in this fireplace or accessory.
- **Twenty-Five-Year Availability of Replacement Parts** - From the eleventh through the twenty-fifth year following the date this fireplace or accessory is first purchased for use, MHSC will make available at our factory replacement parts for this fireplace or accessory, which you may purchase for the list price current at the time your purchase order is received.

What is Not Covered

This limited warranty does not cover:

- Transportation or shipping cost.
- The cost of a service call to diagnose trouble.
- Painted surfaces.
- Damage or defect caused by improper installation, accident, misuse, abuse or alteration.
- Poor ventilation of smoke or gases caused by air-conditioning and heating systems, exhaust fans or pressure differentials produced by wind.
- Broken glass components.
- Cracks in ceramic and castable parts that do not affect safe operation.
- We do not warrant this fireplace to be in compliance with your local building code. Building codes vary greatly throughout the country, and you should determine whether your local building code contains restrictions on the use of this fireplace before you purchase it.
- Blowers or fans, which are warranted separately.
- Heat loss due to the passage of heat or air through or around the fireplace.

Also, under our five year coverage, we do not pay the cost of removal and replacement of any portion of the structure in which the fireplace is situated, made necessary by the repair, removal or re-installation of the fireplace.

And under our twenty-five year warranty of availability of replacement parts, we only promise to maintain a supply of replacement parts at our factory for you to purchase.

Limitations and Exclusions

1. No one has authority to add to or vary this limited warranty, or to create for MHSC any other obligation of liability in connection with this fireplace and accessory.
2. MHSC shall not be liable for incidental, consequential, special or contingent damages you might suffer as a result of its breach of the written warranty or any implied warranty. Some states do not allow the exclusion of limitation of incidental or consequential damages, so the above limitations may not apply to you.
3. This warranty applies only to the original purchaser of the fireplace or to the original owner of the dwelling when the fireplace is installed in a new dwelling and may not be transferred.
4. This warranty applies only to a fireplace sold and used in the United States.

Your Duties

This fireplace must be installed by a qualified installer according to your local building codes and installation instructions and operated according to the owner's instructions. You must keep an invoice, canceled check or payment record to verify the purchase date of the fireplace.

If Warranty Service is Needed...

1. Contact your supplier. Make sure you have your warranty, your sales receipt and the model/serial number of your MHSC product.
2. DO NOT ATTEMPT TO DO ANY SERVICE WORK YOURSELF.

MHSC

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